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ABSTRACT

Presented is the final report of the Special Education Instructional Materials Center at the University of Texas. Described are the 8-year program's two phases: services and training (including development of associate centers in Arkansas, Louisiana, Oklahoma, and Texas, library loan of materials; and information dissemination), and research and development (including materials evaluation and monitoring activities). Listed are four recommendations, regarding materials evaluations, monitoring services, and research. Evaluation reports for the years 1971-74 are included as well as a summary of the SEIMC's accomplishments and recommendations. (CL)

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Final Technical Report
Regional Special Education Instructional Materials Center

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The University of Texas at Austin

Austin, Texas

August 31, 1974

This project reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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Abstract

The University of Texas at Austin Special Education Instructional Materials Center began operation in 1966, through a grant from the Bureau of Education for the Handicapped, U.S.O.E. Originally the UT SEIMC served four states: Arkansas, Louisiana, Oklahoma and Texas, but in August 1971, B.E.H. reassigned the State of Louisiana to the Southeastern Region. As stated in the initial grant, it was the responsibility of the UT SEIMC to stimulate the development of Associate SEIMC's in the region. Actually the program was designed to operate in two phases: 1) services and training and 2) development and research. During the first three years, activities were directed toward the areas of direct service and development of associate centers, but, beginning in 1970, the direction changed and a more comprehensive attitude developed. Services have included consultation and guidance in choice and use of materials, training in the effective utilization of media and materials, library loan of materials, research and evaluation of different facets of the program, development and use of an information retrieval program and the design of research and evaluation instruments.

There is much evidence that because of this eight-year project programs for the delivery of more effective services have been developed in each of the three states in the region served. New legislation has been approved for the handicapped child in each of the three states and it is believed that efforts of the UT SEIMC played an important catalytic role in these accomplishments. Also there is evidence that the SEIMC concept of providing the newest in methods, media and materials to school personnel has resulted in more effective and creditable instructional services being provided the handicapped children and youth of the three-state Region.

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The University of Texas at Austin
Special Education Instructional Materials Center
Financial Expenditures
June 1, 1966 - August 31, 1974

The expenditure table below indicates all expenditures of the UT SEIMC over the entire eight years that the project has been in operation. The figures in the table include all actual expenditures plus an estimate of unliquidated obligations which exist at the writing of this report. The final financial expenditures report will be submitted by the Accounting Office of The University of Texas at Austin on USOE form 489 upon completion of payment of all unliquidated obligations of the project.

	Actual Expenditures and Unliquidated Obligations
1. Salaries and Wages	$1,838,109.00
2. Other Expenses	451,017.00
3. Travel	104,928.00
4. Computer Time	23,563.00
5. Equipment Purchase	148,841.00
6. Overhead	420,024.00
Total	$2,466,482.00
Total USOE Grant funds allocated to the project	$2,471,724.00
Anticipated Balance	$ 5,242.00

FINAL TECHNICAL REPORT

I. OVERVIEW

The Special Education Instructional Materials Center at The University of Texas at Austin (UT SEIMC) had as an overall goal the improvement of education for handicapped children and youth. To this end, objectives and activities of the Center were focused on providing special educators and allied personnel with ready access to valid information concerning instructional materials, methods, curricula, special education programs, teacher education, and research pertaining to the handicapped.

As a member of the SEIMC/RMC National Network, the UT SEIMC was assigned regional responsibility at the initiation of the grant in 1966 for the States of Arkansas, Louisiana, Oklahoma, and Texas. In August, 1971, the Bureau of Education for the Handicapped reassigned Louisiana to the Southeast Regional Resource Center, thus reducing the UT SEIMC regional responsibility to the other three states.

In support of the overall goal of the UT SEIMC, major objectives during the eight years covered in this report have been:

To stimulate the establishment of statewide SEIMC systems within each state served by the UT SEIMC.

To encourage state supported SEIMC systems to participate in activities of the IMC/RMC National Network by contributing to and taking advantage of services offered on a national basis.

To facilitate communications by providing a systems link between the U.S. Office of Education, State Education Agencies, local SEIMC's, supervisors, administrators, materials producers, resource agencies, teachers, and parents.

To disseminate information concerning instructional materials, methods, curricula, special education programs, teacher education, and research for the handicapped.

To offer advisory and consultative services to State Education Agencies and SEIMC's concerning the development and implementation of materials services.

To participate in national, state and local SEIMC projects concerning research, development, and evaluation of instructional materials and services.

To assist associate SEIMC's with staff training, demonstrations, and workshops.

To provide information retrieval services, including the computer retrieval system developed by the UT-SEIMC.

II. GENERAL INTRODUCTION

A. The National SEIMC/RMC Network

The National Plan to Combat Mental Retardation prepared by the Task Force on Mental Retardation, appointed by President John F. Kennedy in 1962, recommended that the U.S. Office of Education study the feasibility of establishing special instructional materials centers for handicapped children and youth. The main objectives of these proposed Centers was to upgrade the instructional programs for these children and to assist teachers in obtaining and using specialized media methods and materials.

By 1964, the Division of Research, Bureau of Education for the Handicapped, U.S.O.E., had established two such Centers for prototypes of the instructional materials centers which were to be funded under P. L. 88-164, Title III. These two Centers were located at the University of Wisconsin and the University of Southern California.

In 1965, representatives of the University of Texas at Austin, the University of Kentucky and the University of South Florida met with Dr. James Moss, Director of Division of Research, B.E.H., at the Southern Regional Education Board in Atlanta. The purpose of this meeting was to discuss with Dr. Moss and his assistant, Dr. Max Mueller, the feasibility of developing a "Southern Regional" network of these three universities to deliver special education instructional services to teachers and others relating professionally with handicapped

children and youth of the Southern region. Dr. Moss and Dr. Mueller not only were impressed with the idea, but upon his return to Washington, Dr. Moss set aside the sum of two million dollars of the budget of the Division of Research for the expressed purpose of developing a National network of such centers. Official announcement was made of the availability of these funds for this purpose and other institutions became interested in developing such centers.

In 1966 eight instructional materials centers were funded, in addition to the two original centers, forming a network across the nation. In 1967 four additional Special Education Instructional Materials Centers (SEIMC) were established and CEC-ERIC was added, enlarging the Network to fifteen. During 1968 the Network was expanded to nineteen centers when the four previously established Regional Media Centers for the Deaf were included in the concept to serve those relating professionally with the deaf. It should be acknowledged here that the concept of the national network of SEIMC's actually came into fruition through the professional foresight of Dr. Moss and his dedication to this concept to the degree that he, somewhat arbitrarily, set aside the original sum of two million dollars for the projects. It is interesting to note that because of his use of this "seed money" he was personally commended by a Congressional Committee for his actions in this regard.

B. The Regional Network

The SEIMC at The University of Texas at Austin (UT-SEIMC) was established as a Regional Center in 1966. The overall objective adopted by the UT-SEIMC was the provision of media, materials and services to professional personnel involved in the education of handicapped children and youth in the states of Arkansas, Oklahoma, Louisiana, and Texas in order to upgrade the instructional programs. Later, in August of 1971, the Bureau of Education for the Handicapped reassigned

Louisiana to the Southeast Region, thus reducing the Regional UT-SEIMC responsibility to Arkansas, Oklahoma and Texas.

The initial stage of operation of the UT-SEIMC focused upon the development of associate SEIMCs; the first network of such centers legislated and funded was the Texas System of SEIMCs. During the two-year period from 1966 to 1968, UT-SEIMC personnel provided direct technical assistance and consultation aid as well as the loan of instructional media and materials to teachers interested in service to handicapped children and youth in the States of Arkansas, Louisiana, Oklahoma and Texas. Subsequent to this initial stage of development, the UT-SEIMC attempted to phase out all direct service to teachers of the handicapped as centers offering services were implemented and located in closer proximity at the State level or at a regional level within the State(s). Clients then became the professional staffs at the SEAs and the regional centers within each State.

During 1970-71, attempts were made to accelerate the development of the SEIMC concept in the States of Arkansas and Oklahoma. Two professionally trained individuals were employed by the Regional UT-SEIMC as Field Directors and assigned to work in these two states as professional staff members of the Special Education Sections of the State Departments of Education. The State Education Agency in each of these states provided office space, secretarial services, supplies and other staff support for these individuals. The long-term objectives of these individuals was to develop a State Plan for a Statewide network of Associate Centers similiar to the one established and operating in the State of Texas.

In summary, the UT-SEIMC was designed to operate in two phases: 1) service and training, 2) development and research. Activities were concentrated during the first three years (1966-69) in the areas of direct service and development of associate centers with less emphasis on the areas of research and training, but beginning in 1970 the foci changed consider-

ably and a more comprehensive attitude developed although the development of associate centers was a major thrust throughout. Services have included consultation and guidance in choice and use of materials, training in the effective utilization of media and materials, library loan of materials, research and evaluation of different facets of the program, development and use of an information retrieval program and the design of dissemination instruments.

C. The Texas System

The Texas System of SEIMCs is the result of a cooperative agreement between the University of Texas at Austin and the Texas Education Agency. The Division of Research, Bureau of Education for the Handicapped, U.S.O.E., directed the UT-SEIMC in April, 1969, to:

-- develop cooperatively with the Texas Education Agency, Department of Special Education and Special Schools, a plan to transfer the service commitment to the TEA;

-- continue to offer consultation to the state education agencies in Arkansas, Louisiana and Oklahoma, but to discontinue direct services to individuals in those states;

-- plan a program in which the UT-SEIMC will assume the responsibility for research, materials development, and training.

In 1969, State legislation (S.B. 230), now referred to as Code 16.16, was passed which legislated and funded the development of a State-wide Texas System of SEIMCs whose responsibility would be the provision of direct services to teachers.

Also, in 1969, six experimental SEIMCs were established in Texas through Title VI funds and in 1970 the second stage of the development of the Texas System of SEIMCs was accomplished when fourteen additional centers were added as a result of S.B. 230, making a total of twenty SEIMCs in the Texas System. When this network of centers started functioning as the Texas System, the Regional SEIMC at The University of Texas at Austin began to provide only maintenance and support services to the State operation; the one exception to this was the

repository service furnished on a contractual basis to the Associate Center located in Austin (Education Service Center, Region XIII, which emcompasses Austin and fifteen surrounding counties). This service was terminated on August 31, 1972. Following this was a reduction in library hours at the Regional UT-SEIMC to allow increased staff availability for support and consultative activities in Arkansas, Oklahoma and Texas.

Today Texas has twenty Regional Education Service Centers strategically located throughout the State which serve as the service arm of the Texas Education Agency. Each of these Education Service Centers has an SEIMC operation which is one of the three specific responsibilities of the Special Education component; the other two activities are the provision of appraisal services and in-service education. Service is offered to the assigned geographical region of the State delivering services to the professional personnel relating with handicapped children.

D. The Oklahoma System

On October 19, 1970, a meeting was held in Oklahoma City with the Administrator of Special Education for the State of Oklahoma to discuss the possibilities for increasing SEIMC services in that state. In February, 1971, it was decided that services to Oklahoma could be strengthened by employing a full-time Field Director for Oklahoma with his salary and travel expenses being paid by UT SEIMC. It also was agreed that the Special Education Section of the Oklahoma State Education Agency would provide secretarial assistance and office space. This Field Director was employed on July 5, 1971, and his general responsibility was to assist the State Administrator of Special Education with the planning and the development of Instructional Materials Centers and services for Oklahoma. The development of special education services was strengthened in 1971 with the passage of H.B. 1163, Section 1.9, which made available $1,250,000 for the purpose of funding 250 new special education classes in the State; some of the funds were used to establish Special

Education Prescriptive and Resource Centers. By 1973 sixteen Regional Education Resource Centers were operational and by July, 1974, four more were added, making a total of twenty in the Oklahoma Network.

E. The Arkansas System

On September 21, 1970, a meeting was held in Little Rock with the Coordinator of Special Education, State of Arkansas, and the four Special Education Supervisors. It was determined that funds were not available for the establishment of SEIMCs in Arkansas and that any services provided in Arkansas could be handled directly by UT SEIMC, if channeled through the State Coordinator's office.

In February, 1971, it was decided, through mutual agreement between UT SEIMC and the State Coordinator of Special Education in Arkansas, that services to Arkansas could be strengthened by UT SEIMC hiring a full-time Field Director for Arkansas who would be a staff member of the Special Education Section. On April 1, 1971, such a person was employed and prior to beginning his work in Arkansas he spent three weeks at UT SEIMC for indoctrination and training concerning services available from the Texas Regional Center. As with the Field Director assigned to Oklahoma, the salary and travel expenses of the Arkansas Field Director have been paid by UT SEIMC and the secretarial assistance and office space have been provided by the State Coordinator of Special Education in Arkansas. The primary objective of this endeavor was to initiate some services to Arkansas which would generate interest and result in state funding to support SEIMCs in Arkansas.

In 1973 the State of Arkansas passed Act 102 which mandated special education service but, at this date, funding has not been appropriated; in the Act there is provision for Special Education Instructional Materials Centers

Since 1971 a total of four SEIMCs have been developed through support from the UT SEIMC. Three of these centers were placed in teacher training institutions and one was placed in

the Special Education Section of the State Department of Education. During the coming year, 1974-75, plans are projected to establish two additional centers in public schools and these centers will be funded out of Title VI monies designated for the State of Arkansas.

It is generally believed by those receiving the services of the Regional UT SEIMC, as indicated by various needs assessment studies, status evaluations and unsolicated testimonials, that during the past eight years this program has been in operation, services to the handicapped in this region have become better organized, more meaningful and, certainly, more professional. Through the efforts of the UT SEIMC project, programs for the delivery of more effective services have been developed in each of the three States in the region and more effective and creditable instructional services are being provided the handicapped children of this region.

The remainder of this Final Report of the eight year operation of the UT SEIMC will present each of the three areas of operation--program administration, service and training, and research and evaluation.

III. PROGRAM ADMINISTRATION

A. Center Administration

Internal administration of The University of Texas Special Education Instructional Materials Center (UT SEIMC) has been the responsibility of the Project Director, Center Director, and the Executive Committee of the UT SEIMC. The Executive Committee has included the Project Director, Center Director, and the Division Chiefs of the SEIMC (see attachment PA-1, Organization Chart). The Executive Committee has met at least once each month to review progress being made toward accomplishment of the objectives of the Center and to plan future activities and schedules to meet commitments of the Center.

B. Regional Administration

An Advisory Committee to the UT SEIMC has participated in planning on an annual basis to give general guidance concerning major objectives of the Center and areas of emphasis by state. As a policy this committee considered objectives which were common throughout the three state region (Arkansas, Oklahoma, and Texas) and then activities which were unique to each state.

The Advisory Committee has been comprised of the UT SEIMC Executive Committee; the three State Directors of Special Education; the Chairman, Department of Special Education, The University of Texas at Austin; and the Director of the Texas System of SEIMC's. In addition, representatives of ancillary organizations with interest in education for the handicapped were added to this Advisory Committee. These included: Director, Special Education Section, Austin Independent School District; State Coordinator, Special Education, Education Service Center, Texas Region XIII; Assistant for Mental Health Education, Hogg Foundation; and the Executive Director, Texas Association for Retarded Children. From time to time ex-officio members were invited to the Advisory Committee meetings to provide additional information which would be helpful

in the planning process. These included representatives from BEH and the Southwest Regional Media Center for the Deaf.

Prior to each Advisory Committee meeting, the UT SEIMC Executive Committee prepared and distributed to the State Directors a suggested list of activities for each state. State Directors had the option to accept, reject, modify, or add to these activities. The entire Advisory Committee then met to develop long range plans for the UT SEIMC. The final recommendations of the Advisory Committee concerning objectives and strategies which the UT SEIMC should persue were those which were submitted to BEH in each Fiscal Year's continuation proposal.

Each state in the UT SEIMC region (Arkansas, Oklahoma, and Texas) had an Advisory Council or Board which developed intra-state program plans for their particular state. The state Advisory Councils or Boards consisted of members from the State Special Education office, associate SEIMC's, and ex-officio members from the UT SEIMC Executive Committee. Normally these boards met two times a year for the purpose of establishing policies, procedures, and activities appropriate to their state.

C. National IMC/RMC Administration

The UT SEIMC participated in National IMC/RMC decision making processes in the following ways:

The UT SEIMC Director attended all National Network Director meetings. Also, other key staff members attended these meetings when requested.

The UT SEIMC Director of Research and Evaluation was a member of the Delphi group on materials evaluation.

The UT SEIMC Director of Information Retrieval was a member of the Delphi group on thesaurus development and information retrieval.

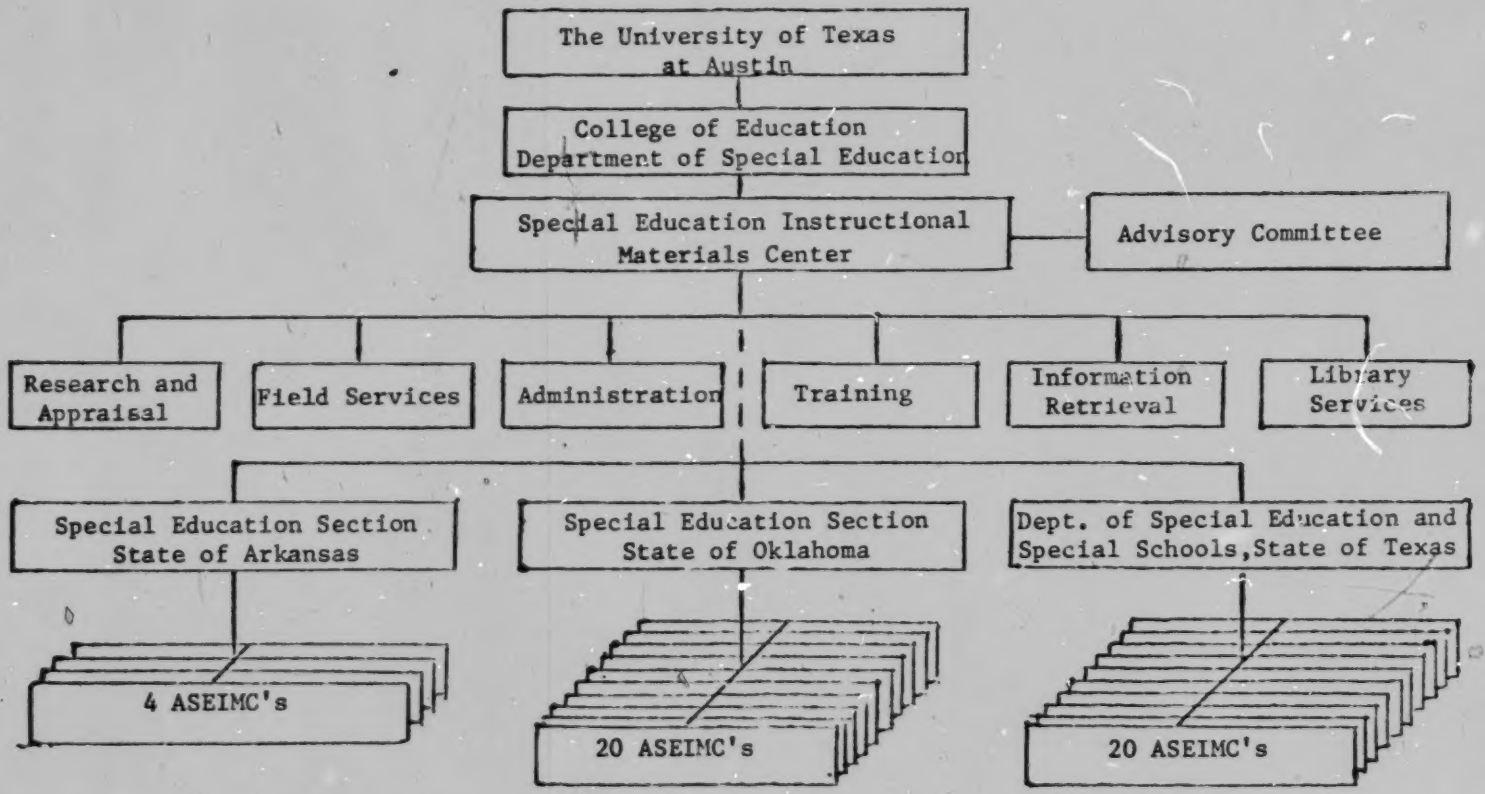
The UT SEIMC Director of Training was a member of the Delphi group for development of a training manual.

D. Summary

The administrative structure of the UT SEIMC proved effective over the eight year period of the project. The practice of involving special education supervisors from all levels within the framework of regional and state organizations produced an atmosphere of cooperation which was vital to the success of the project. The use of representatives and consultants from ancillary organizations also helped in obtaining program support and legislation which were critical to development of intra-state networks of centers which now provide direct materials services to teachers of the handicapped. Specific information concerning accomplishments of the UT SEIMC is contained in the remainder of this report.

CHART I

ORGANIZATION CHART
SPECIAL EDUCATION INSTRUCTIONAL MATERIALS CENTER
THE UNIVERSITY OF TEXAS AT AUSTIN



IV. SERVICES

A. Associate Center Development

The initial charge in the grant made to the Regional SEIMC, The University of Texas at Austin, was to stimulate the development of associate Special Education Instructional Materials Centers in the four state Region: Arkansas, Louisiana, Oklahoma, and Texas. Initially direct services to professionals were offered from the Regional SEIMC if a request were authorized by an administrator of a local school district, institution, agency, or by the Special Education Section/Division of the State Department of Education. The direct services were offered from 1967, when the Regional SEIMC became operational, until September, 1969; a directive (April 1969) from the National Advisory Committee to the Bureau of Education for the Handicapped indicated that a re-evaluation of activities of the Regional SEIMC at UT at Austin had been made and that the following recommendations were to be followed in future services:

> ...to concentrate on the development of a Texas System of Instructional Materials Centers which would take advantage of the Texas Regional Education Service Centers as key elements,
>
> ...to enter into a cooperative arrangement between The University of Texas at Austin and the Texas Education Agency which would facilitate the eventual assumption of the service commitments by the State, allowing The University to concentrate on research, development and training responsibilities,
>
> ...to continue to offer consultation to the State Education Agencies in Arkansas, Louisiana, and Oklahoma, but to discontinue direct services to individuals in those states.

The State of Texas, in the Fall of 1969, activated six Special Education Instructional Materials Centers as a part of the Texas System of SEIMC's and to function as an integral part of the Special Education Component of the Regional Education Service Centers; the number of SEIMC's grew to twenty in the fall of 1970 after legislation and funding from State funds were secured (Senate Bill 230, converted to School Code 16.16). Services of coordination and guidance concerning media, materials, and educational technology,

loan of materials, workshops, preparation of reading lists of professional materials, the information retrieval program, etc., were offered through the Special Education Division, Texas Education Agency, and the Director, Texas System of SEIMC's, by the staff of the Regional SEIMC. Clients for services were the professional staffs of the SEIMC's of the Texas System of SEIMC's.

Planning with the Directors of the Special Education Divisions of the four respective States in the Region was done during 1970-71. The State of Louisiana chose, effective September 1, 1971, to associate with the Southeast Regional Resource Center. The States of Arkansas and Oklahoma accepted a plan in which the Regional SEIMC would pay the salary and travel expenses of a Field Director for Regional SEIMC services in the respective States; contributions by the States of office space, secretarial assistance, communication costs, etc., were made. Each Field Director was considered a part of the professional staff of each respective State. An upsurge of activity in the States of Arkansas and Oklahoma occurred with the employment of the Field Directors. The State of Texas through the Special Education Division and the Director, Texas System of SEIMC's, planned cooperatively the support services from the Regional SEIMC to the associate centers. The position of Director, Texas System of SEIMC's, was totally funded through the Division of Special Education, Texas Education Agency.

Stimulation for development of associate Special Education Instructional Materials Centers resulted in the ultimate setting up of Networks of SEIMC's in the three States with forty-four associate centers: Arkansas, 4; Oklahoma, 20; and Texas, 20. The Networks in the States of Oklahoma and Texas have stabilized at 20 each; it is anticipated that additional growth will occur in the Network in Arkansas.

1. The State of Arkansas

The Coordinator of the Special Education Section, Arkansas State Department of Education, Mr. Tom Hicks, was contacted after the Regional SEIMC received the grant for

the Center. Mr. Hicks and his supervisory staff were supportive of the concept and desired all services possible for those relating with handicapped children and youth in the State of Arkansas. Copies of the brochure and application forms for membership were forwarded to Arkansas for distribution; as a result some limited contacts were made during the period from 1966 through 1969:

1966-67	20	Field Contacts
1967-68	125	Field Contacts
1968-69	239	Field Contacts

In the spring of 1969 a directive from BEH notified the Regional SEIMC that there should be a concentration on activities in the State of Texas, since legislation and funding for associate SEIMC's had been passed and funded by the Legislature; services to the other states, including Arkansas, in the Region were to be curtailed in order to attempt to help implement the Texas System of SEIMC's. Consequently, only two individuals from the State of Arkansas were assisted through the Regional SEIMC during the 1969-70 scholastic year.

Two centers working with handicapped children and youth in the State were established and were granted Title III monies through the Special Education Section Office, although they were not specifically considered associate SEIMC's. These centers were:

Jenkins Memorial Center, Pine Bluff, Arkansas (Mr. Joe Sweatt, Director)
Southwest Arkansas Diagnostic and Remedial Services Center, Magnolia, Arkansas (Dr. Fay Smith, Director)

Consultation and guidance, loan of materials, and other services were provided these centers from the time of their initiation, September 1, 1968. The Jenkins Center has become affiliated with the United Fund and other agencies for funding at this time; the Southwest Arkansas Diagnostic and Remedial Services Center is now under the auspices of the Magnolia Public Schools.

In February 1971 Mr. Tom Hicks, Coordinator, Special Education Section, endorsed the suggestion of a Field Director for the State of Arkansas to represent the Regional SEIMC and to offer direct services to those relating professionally with exceptional children and youth in the State. The

salary, employee benefits, and travel were to be paid by the Regional SEIMC; the Special Education Section office was to contribute office space, secretarial assistance, communication facilities, etc.

Mr. David Bailey was employed on April 1, 1971, in the position as Field Director; it was anticipated that his chief responsiblity would be to inform individuals, schools, and agencies working with handicapped children and youth of services available through the State of Arkansas Special Education Section office via the Regional SEIMC. His responsibilities included the dissemination of information through-out the State and communication to the Coordinator and Supervisors of information concerning media, materials, and educational technology. A brochure citing services available and procedures for securing them was designed and distributed. Orientation meetings and workshops were arranged for those in special education. Mr. Bailey resigned his position on January 15, 1972, to enter a seminary; Mr. Hugh Pace was employed in the position effective April 1, 1972.

Mr. Pace continued the dissemination activities initiated by Mr. Bailey. He held workshops pertaining to the effective utilization of instructional materials; he trained eligible users in the formulation of requests for matching of child-use materials, through the Information Retrieval Program developed at the Regional SEIMC, to the needs of those with problems in learning. The Advisory Council to the Arkansas SEIMC was formed during his tenure and two meetings of the group to assist in directing the activities of the implementation of the concept of the SEIMC in Arkansas were held during 1972-73. A list of the members chosen to serve on the Advisory Council plus the Minutes of their two meetings may be found in Attachment 5 of the 1972-73 Annual Report of the Regional SEIMC. A brochure delineating the services of the Arknasas SEIMC was designed, printed and distributed; the Large Mobile Demonstration Unit was utilized in school districts having special education classes and at the annual meeting of the CEC section of

the Arkansas State Teachers Association. Newsletters detailing information concerning media, materials, and education technology were produced and mailed to all those in special education in the State.

Mr. Pace catalogued the materials which were then available in the Special Education Section Office, Little Rock, and processed them for checkout to eligible users, thus initiating the first associate SEIMC in the State of Arkansas. He processed requests for instructional materials from personnel in the State of Arkansas to the Regional Center; the Addendum of Instructional Materials published by the UT SEIMC was distributed to eligible users. During 1971-72 he established the first associate center to the SEIMC which is located at Little Rock; that center was set up at Arkansas State University (ASU) in Jonesboro with Dr. Robert Ohlsen, Jr., as Director. Mr. Pace, working with Mr. Hicks, formulated a tentative plan for a Network of Associate SEIMC's in the State of Arkansas; the plan projected two additional centers to be established at Henderson State College, Arkadelphia, Dr. Carl Durkee, Director, and Arknasas State University, Conway, Dr. Harold Love, Director. The teacher-training institutions were chosen because no funds were available for staff or materials and because the institutions agreed to staff the centers and to house the collection of materials. The Regional SEIMC agreed to supply some materials and dedicated funds for purchase of materials to stock the centers on a limited basis. Mr. Pace assisted in the selection of materials for purchase for the two associate SEIMC's to be added in the fall of 1973; he also helped in the selection of materials to supplement the holdings of the centers at Jonesboro and Little Rock. Mr. Pace resigned (July 31, 1973) his position to enter graduate school at The University of Arizona.

ACT 102 (1973) was passed by the Arkansas Legislature and mandated services to handicapped children and youth by 1978; included in the ACT was a stipulation concerning the development of Special Education Instructional Materials

Centers. Complete funding for the ACT has not yet been accomplished. Mr. Hicks was the chief promoter of the legislation.

Miss Diane Sydoriak was employed on August 1, 1973, to fill the position of Field Director, Network of Special Education Instructional Materials Centers, State of Arkansas. Responsibilities of Miss Sydoriak have included the implementation of the two new associate SEIMC's and support activities to the center at Jonesboro; in addition, processing of materials for the Little Rock Center, as well as the other centers, has consumed much time, since limited staff help was available for this task. The plans for training activities offered to personnel in Arkansas through the Regional SEIMC were modified somewhat to meet the time frame; arrangements for the training sessions were made by the Field Director. An emphasis on teacher contacts in relationship to media, materials, and educational technology coordinated with the Supervisors of the Special Education Section staff was carried out during the 1973-74 scholastic year. An "Official List of Books and Other Instructional Materials for Special Education (Secondary Level)" was printed and distributed through the Little Rock SEIMC. Dissemination activities to alert eligible users to services were achieved through a brochure which was designed and distributed through the SEIMC Newsletters. A meeting of the Advisory Council was held in October of 1973; the Advisory Council will be dissolved at the end of August 1974, since ACT 102 (1973) provides for an Advisory Council to the Special Education Section, State Department of Education, which will serve the Network of SEIMC's as well as other concerns of Special Education in the State. In addition to the large number of individual consultations with teachers concerning materials, the Large Mobile Demonstration Unit from the Regional Center was scheduled for multiple visits in the State; the Field Director accompanied the unit as the professional consultant.

A Handbook for associate SEIMC's in the Arkansas Network was prepared for the training session in October with personnel from centers. A tentative State Plan

for the Development of a Network of SEIMC's (Learning Resource Centers) has been formulated; a copy of that plan is Attachment FS-13 in the 1973-74 Annual Report of the Regional SEIMC. Projected plans for 1974-75 include the funding (Title VI through the Special Education Section Office) of two additional Centers to serve areas not now in close proximity to service: the northwest region, Fayetteville, and the eastern region, Helena. Both of these projected centers will be established in public schools. A comparison will subsequently be made to determine whether centers housed at teacher-training institutions or in public schools deliver the better services to professionals. The projected centers will have trained staff members to man them.

Conclusions: An upsurge of activity in media, materials, and educational technology accompanied the employment of a Field Director for the State of Arkansas, who was a member of the staff of the Special Education Section. Total numbers of individuals with whom contacts have been made in Arkansas in the areas of Field Service and Training since 1970 are:

1970-71	541
1971-72	1412
1972-73	3794
1973-74	2411

A Recapitulation of the figures broken down by personnel served in the State of Arkansas appears in Attachment FS-1. Chronologies of field activities are included in each Annual Report of the Regional SEIMC.

Stimulation for development of associate centers has resulted in a Network of four SEIMC's which are operational during 1973-74; status reports for the four centers as of September 1, 1973 (FS-9) and of August 1, 1974 (FS-11) are located in the 1973-74 Annual Report of the Regional SEIMC. Two additional SEIMC's are projected for development during 1974-75; Mr. Roy Wood, Coordinator (effective July 1, 1974) has budgeted Title VI funds for this purpose. Legislation has addressed the concept of the SEIMC in ACT 102; it is anticipated that funding for further implementation of the concept will be

forthcoming from future legislative sessions.

The Coordinators of Special Education, Supervisors, and Dr. A. W. Ford, Director, State Department of Education, State of Arkansas, have been most cooperative with the Regional Center in the design and implementation of activities.

2. The State of Louisiana

Direct services were offered through the State Department of Education, Special Education Section, Mrs. Faye McCormick, Director, to those employed professionally in special education from 1966 through 1969. Limited presentations were made to individuals in the state during the initial period of operation of the Regional Center, 1966-67; however, activity increased during the period from 1967 through 1970:

1966-67	15 Field Contacts
1967-68	474 Field Contacts
1968-69	333 Field Contacts
1969-70	995 Field Contacts (A portion of this figure represents participants at the Special Conference on Early Childhood Education sponsored by CEC)

Discussions were held during 1970-71 with the Director of Special Education to offer ways in which more services might be made available to special education personnel in that State; one suggestion was the arrangement for providing the services of a Field Director from the Regional SEIMC to participate on the staff of Special Education in Louisiana to offer direct services to eligible users. The Southeast Regional Center was funded during this time and made an offer to the State of Louisiana for services; the latter offer was chosen and in August of 1971 the State of Louisiana was officially assigned to the Southeast Regional Center.

Conclusions: Dissemination of information concerning the Special Education Instructional Materials Center concept was done through orientation sessions, workshops, utilization of the Large Mobile Demonstration Unit, participation in conferences, distribution of the 1969 Catalog and specialized reading lists. The growth in numbers of participants in

activities is evidenced from statistics reported in the Annual Reports of the Regional SEIMC from 1966 through 1970. Technical assistance was given to the center located on the college campus of Nachitoches, Louisiana (Dr. Cousins, Director). No associate centers were established during the Regional SEIMC contacts with the State of Louisiana, 1966-70. The Director of Special Education did participate on the Advisory Council to the Regional SEIMC.

3. The State of Oklahoma

Dissemination of information concerning the concept of the Special Education Instructional Materials Centers, and the Regional SEIMC at UT at Austin designated to serve the State of Oklahoma, was done through the office of the Administrator, Special Education Section: Dr. Maurice P. Walraven. Limited direct services and field contacts were made during the period from 1966-70 as evidenced in the Annual Reports from the

Regional SEIMC:	1966-67	20 Field Contacts
	1967-68	602 Field Contacts
	1968-69	640 Field Contacts
	1969-70	78 Field Contacts

Field services in the State consisted of displays of materials, utilization of the Large Mobile Demonstration Unit to allow examination of materials, orientation sessions, workshops, dissemination of information pertaining to media, materials, and educational technology through the 1969 Catalog, brochures, and specialized reading lists.

In 1969 BEH indicated to the Regional SEIMC that direct services to the region, other than to Texas which had achieved legislation and funding for associate SEIMC's, should be curtailed. During 1970-71 discussions were held with the Administrator for Special Education to explore more and better ways to serve the special education personnel in the State of Oklahoma. In February of 1971 the Administrator accepted the plan for having a Field Director, as a representative from the Regional SEIMC, join the staff. On July 5, 1971, Mr. Leo Shreck, a special educator, assumed the position of Field Director. The Regional SEIMC defrayed the costs of

salary, employee benefits, and travel; the Special Education Section office provided office space, secretarial assistance, communications, etc.

The Oklahoma City Public School System and the Tulsa Public School System (MERC) have had collections of instructional materials available to professional staff members in their respective school districts for several years. In June of 1969 MSCD contracted with the Sallisaw Public Schools (as fiscal agent) for the Northeast Oklahoma Regional Audio-Visual and Instructional Materials Center for Handicapped Children; the center served a ten county area and the Administrator for Special Education was a member of the Advisory Council of the Center. Subsequently, this center became a part of the Special Education Prescriptive Teaching and Resource Center Network in August of 1973. Another project, the Pontotoc County Learning Laboratory (funded with Title III funds) located in Ada, Oklahoma, was phased into the Network of Regional Education Resource Centers with special education components on July 1, 1974; it had originally served only Pontotoc county, however, it will assume additional geographical area to be served.

In 1971-72 four Special Education Prescriptive Teaching and Resource Centers were implemented in the State of Oklahoma; funds for staff were provided through HB 1163, Finance Section, Sections 1, 9 and 10 (1971) which allowed $1,250,000.00 to fund 250 new special education classes. Materials were funded through Title VI EHA allocated to the Special Education Section. The four centers activated were located at Ardmore, Cushing, Bartlesville, and Lawton. In 1972-73 a center was added at Elk City, Oklahoma.

Legislation in 1973 provided funding for Special Education Prescriptive Teaching and Resource Centers to support activities of the on-going special education program in operation and the 220 new classes activated in the fall of 1973. Ten additional centers were added to the Network of Special

Education Prescriptive Teaching and Resource Centers in the fall, also; these were located at Kingfisher, Stillwater, Tulsa, Hugo, Moore, McAlester, Muskogee, Alva, Ada, and Guymon (which was designated as a satellite to the Elk City Center). In addition to the ten, the center at Sallisaw, which had formerly been a contract with MSDC, was added to the Network; consequently, in the fall of 1973 there was a network of sixteen centers in operation to serve those working with handicapped children. The general objectives of the SEPTRC's were: educational diagnostics, prescriptions/education plans, prescriptive teaching, evaluation of results, in-service training, and effective utilization of media, materials, and educational technology.

The name of the centers was changed in the fall of 1973 to Regional Education Resource Centers and each contained a Special Education Component to be staffed by a director (special educator/psychometrist), a psychometrist, a prescriptive teacher-counselor, and a secretary. Each individual engaged in a special education program in each geographical area served by a center was contacted by a professional staff member. Referral for appraisal services came from the administrators of the school districts within the region; educational plans and suggestions of appropriate media, materials and equipment were cited for those evaluated. Loan of media and materials to implement the educational plan/prescription were readily available from the center. Dr. Jimmie Prickett was appointed as State Director of the Regional Education Resource Centers in the State of Oklahoma by Dr. Leslie Fisher, Superintendent, Department of Education, to administer the program.

On July 1, 1974, four additional Regional Education Resource Centers were activated to make a total Network of twenty centers with special education components; this is reported to be the saturation point in the State of Oklahoma for centers. Geographical areas of all centers have been adjusted to guarantee that all eligible users have access to services. The four new centers are located at Altus, Alva, Anadarko, and in Oklahoma County.

The Field Director was responsible for planning with the UT at Austin Regional SEIMC staff for the training needs to be met through workshops, conferences, and orientation sessions. He did training in utilization of the Information Retrieval Program developed by the Regional SEIMC, planned Publishers' Conferences, helped design and distribute brochures which described services available from the centers to professionals relating with the handicapped, disseminated copies of the 1969 Catalog and the 1972 Addendum published by the Regional SEIMC, distributed copies of specialized reading lists, consulted with staff members concerning new media, materials, and educational technology, consulted with producers of materials, participated in training programs of students at the pre-service level and of professionals at the in-service and continuing education levels, assisted in needs assessment evaluations, represented the Special Education Section at professional meetings to inform participants of services available from the centers, and served as the communication link between the Regional SEIMC and the Administrator of Special Education and his staff.

The Field Director has functioned in a leadership role in the development of services pertaining to media, materials, and educational technology. One of the chief responsibilities carried on by the Field Director was the technical assistance which he gave or which he secured from the Regional SEIMC to assist new centers as they were activated. An Advisory Council made up of the professional staff members of each center assist in setting objectives for the Network; the Advisory group met once in 1972-73 and again in 1973-74. The Field Director planned and implemented the meetings.

Conclusions: A rapid increase in numbers of individuals served through field contacts occurred after the employment of the Field Director for the State of Oklahoma, who was a member of staff of the Special Education Section with a specific responsibility in the area of media, materials, and educational technology. Total numbers of individuals with whom

contacts were made in the areas of Field Service and Training since 1970 are:

1970-71	92 Field Contacts
1971-72	1412 Field Contacts
1972-73	3794 Field Contacts
1973-74	3821 Field Contacts

Verification of the statistics reported and the classification of personnel assisted is contained in the Attachment FS-1.

Stimulation for development of associate centers and dedicated work by members of the State Department of Education in the State of Oklahoma to secure legislation and funding is to be commended; direction of Title VI EHA funds have been utilized to develop the concept, also. Through these efforts a Network of twenty Regional Education Resource Centers with special education components is in operation at the close of the 1973-74 scholastic year. Guidelines for operation of the centers have been drawn up, staffing patterns with trained personnel have been established, and evaluation and accountability measures have been instigated to measure the effectiveness of the program.

The Administrator of the Special Education Section, his staff, and Dr. Leslie Fisher, Superintendent, State Department of Education have been most cooperative with the Regional SEIMC. This appears self-evident when one examines the design and implementation of the Network concept supported through legislation and funding.

4. The State of Texas

Administrative personnel of the Special Education Department of the Texas Education Agency supplied letters of support to the original grant when it was written in 1966 by members of the Department of Special Education, The University of Texas at Austin. That support and cooperation has been manifested throughout the life of the project. In 1967-68 the Department had a needs assessment study conducted concerning those in the State of Texas with problems in learning; the study revealed that the three concerns with highest priority were: (1) trained manpower to staff positions, (2) adequate appraisal of learners, and (3) media and materials.

As a result of that study, plus the impact of the developing SEIMC concept, the Department formulated a plan whereby the three concerns cited would be met, including provision of services through the Education Service Center model offering media, materials, and educational technology collections and training.

From the time of the implementation of the Regional SEIMC concept in 1966, direct services related to media and materials were offered to professionals working with exceptional children and youth throughout the State; stimulation for development of centers was a prime objective.

September 1, 1968, the Special Education Department of the Texas Education Agency funded (Title III and Title VI) Project APPRAISE in Region XIV, Abilene; the ESC had responsibilities in providing technical assistance and materials. An associate center was established through Title III, P.L. 88-164 funds on the campus of East Texas State University, Commerce, Texas. Neither the Project or the associate center located at ETSU was considered a formal part of the Texas System of SEIMC's which was organized later, however, they were the first organized projects concerned with materials and media.

On September 1, 1969, six ESC's were funded at a $30,000.00 level (Title VI monies from the Special Education Department, Texas Education Agency) by Dr. Robert Montgomery, Assistant Commissioner for Special Education and Special Schools, to initiate experimental special education materials centers; five of the centers were involved in the evaluation of instructional materials for use in the classes for the educable retarded. These five centers were located at:

Region II, Corpus Christi
Region IV, Houston
Region VII, Kilgore
Region XI, Fort Worth
Region XVI, Amarillo

The sixth location of a center in the plan was at Region XIV ESC, Abilene, where Project APPRAISE was in operation. Direct

services from the Regional SEIMC to individual professionals served by these six centers was discontinued effective January 1, 1970, since the centers of the Texas System were to assume this function; support services from the Regional SEIMC were continued at the request of personnel from the SEIMC at the ESC.

The 1969 Texas Legislature passed Senate Bill 230 (now Code 16.16) which provided services and funding to meet the needs of handicapped children and youth in the State. Services provided were (1) in-service training, (2) appraisal services, and (3) instructional media and materials services. Fourteen additional SEIMC's were added to the six experimental centers activated in 1969 to complete the Texas System of Special Education Instructional Materials Centers. The fourteen centers added were located at:

Region I, Harlingen (Edinburg)
Region III, Victoria
Region V, Beaumont
Region VIII, Mt. Pleasant
Region IX, Wichita Falls
Region X, Richardson
Region XII, Waco
Region XIII, Austin
Region XV, San Angelo
Region XVIII, Midland-Odessa
Region XIX, El Paso
Region XX, San Antonio

Senate Bill 230 (Code 16.16) provided a formula for funds to provide services in the three service areas noted previously; the funds were made available to the local education agencies, which contributed on a formula basis to the support of the SEIMC located at each ESC. Title VI funds from the Special Education Department, TEA, ($55,000.00 per ESC) supplemented the SB 230 funds; in addition the SEIMC derived some assistance through Title III funds, since that was the base funding for the Education Service Centers. A sub-contract was negotiated with Region XIII by the Regional SEIMC to provide SEIMC services to the clients of that Region; this contract was in force through the 1971-72 scholastic year when Region XIII activated its own SEIMC. Direct services to individual

professionals in the fourteen centers listed above was discontinued on September 1, 1971; subsequently support activities from the Regional SEIMC were available only through the SEIMC component of the ESC.

After the passage of Senate Bill 230 (Code 16.16) by the Legislature, the Texas State Board of Education adopted the State Plan for Special Education on February 7, 1970; the plan established the allocation for special media and materials services. In July of 1971 the "Statewide Design and Policies of the Texas Network, Texas System of SEIMC's" was distributed by the Special Education Department, TEA. Dissemination meetings were held with the Executive Directors of the Education Service Centers to explain the concept and its implementation. Responsibility for organization of the concept at the Education Service Center level and provision of services was vested in a Coordinator/Director of Special Education Services employed at each ESC; these individuals were the administrators of all activities pertaining to special education, including the centers providing instructional materials.

Administration of the Texas System of Special Education Instructional Materials Centers at the state level was assigned to Mr. Don Weston, Director of Development and Planning. Mrs. Dainey Lege', who had been and was directing the evaluation of Instructional Materials Evaluation Project, was named as the Director of the Texas System of SEIMC's.

A Policy Advisory Council was formulated to assist in suggesting considerations of procedures and changes in policy to enhance the development of the system; personnel on the Council included the Assistant Commissioner for Special Education and Special Schools, the Director of Special Education and the Director of Deveopment and Planning from the Special Education Department, TEA, the Chairman, Department of Special Education, The University of Texas at Austin, the Principle Investigator and the Center Director

of the Regional SEIMC. An Advisory Council, comprised of representatives from each of the twenty centers in the Texas System of SEIMC's, offered guidance for direction and change of activities made available to users through the centers. The Director, Texas System of SEIMC's, and the Field Director, Regional SEIMC, served as Co-Chairpersons for the Advisory Council. Two meetings were held annually, usually at the time of the scheduled Publishers' Conferences.

A training session for personnel employed to staff the SEIMC's in Texas, the first of Annual Training Sessions, was held at Region VII, Kilgore, July 28-30, 1971. Professional staff members from the six centers which had been in operation for a year assisted the Director, Texas System of SEIMC's, TEA staff members, and staff members of the Regional SEIMC in the training. Annual training sessions have been held for this staff component; copies of the training packages and evaluations of each project are included in copies of the Annual Reports for the Regional SEIMC for 1970-71, 1971-72, and 1973-74.

Plan A for Comprehensive Education of Students in the State of Texas, instigated as a result of the passage of Senate Bill 230 in 1969, provides for the mainstreaming of those with problems in learning who can profit from that instructional arrangement. Multiple instructional arrangements are available to school districts as they phase into Plan A, which is expected to be accomplished throughout the State by 1976. With the development of the mainstreaming concept teachers of regular classes are eligible for services from the special education component of the ESC, including the SEIMC, provided a learner has been evaluated and found to be in need of specialized services.

Publishers' Conferences for staff members from the Texas System of SEIMC's were arranged twice annually to allow developers of appropriate instructional media and materials to present information concerning new products. As experience was gained from this process, it was found that requests directed to presenters to provide a consultant who

knew a material or materials in depth was much more effective in the training of the staff than to have a presentation by an individual primarily responsible for sales. The "Analysis of Instructional Materials" form developed by the Regional SEIMC was used by the presenters to give in an organized manner the information concerning a material or materials discussed. The Director of the Texas System of SEIMC's and her staff made the arrangements for the Conferences; Field Directors from the States of Arkansas and Oklahoma also participated in these Conferences.

The Information Retrieval Program for matching of instructional materials to the needs of learners, developed by the Regional SEIMC, was supported by the Texas System of SEIMC's. Training sessions were held by the Regional SEIMC for staff members of the SEIMC's, and personnel invited by them to instruct users in the use of the program. A training package (large group) was developed in 1971-72 by the Training Section and a copy distributed to each SEIMC; a small individualized training package to instruct in the use of the Information Retrieval Program was developed and distributed during 1972-73. Information concerning utilization of the Program is contained in Work Area IV for the years 1971-74. Numerous retrievals were processed on an experimental basis from 1967-71 for clients in the Texas System in which instructional materials were matched to learning needs of students.

Consultation and guidance, including workshop presentations and the use of the Large Mobile Demonstration Unit, were used throughout the System to assist in the upgrading of skills in the analysis and evaluation of materials. Training activities were offered in the form of workshops, institutes, and courses dealing with library functions, materials and media utilization, new instructional materials produced for the market, implications of research related to media and materials, and adaptations and modification of materials to meet the needs of those served.

Dissemination documents were prepared by the

Regional SEIMC and shared with personnel of the associate SEIMC's; these included the Regional SEIMC Newsletter, Descriptor, copies of the List of Instructional Materials and Resource Materials Available to Teachers of Exceptional Children and Youth (1969 Catalog), the Addendum (1972) to the aforementioned List, brochures, and specialized reading lists (see attachments in each Annual Report of the Regional SEIMC).

In conjunction with the Training Component of the Special Education Department, TEA, two special study institutes were provided through the Education Service Centers (Region XIII and Region III, fiscal agents) and the Regional SEIMC: Special Study Institute: Development of Pupil Appraisal Personnel and Special Materials Specialists (copies of the syllabi for the two Institutes are on file with the Annual Reports of the Regional SEIMC for 1970-71 and 1971-72).

Growth of the participation of eligible users as a result of the associate center development in the State of Texas is shown in the Annual Reports of the Regional SEIMC; the information in the chronologies cited in the reports does not include statistical information from the twenty centers in the Texas System, since those data are included in their Annual Activity Reports. The recapitulation (see report next page):

Number of Field Contacts through:

	Regional SEIMC	Texas System	Total
1966-67	4475	NA	4475
1967-68	5781	NA	5781
1968-69	9158	NA	9158
1969-70 (Texas - 6 Centers)	7852	Unavailable	7852
1970-71 (20 Centers)	5923	Unavailable	5923
1971-72	5466	20,236	25,702
1972-73	3661	35,671	39,332
1973-74	2161	41,019	43,180

(See folder* for complete Texas System information.)

The Large Mobile Demonstration Unit, or an exhibit describing services available from the Regional SEIMC and the Texas System of SEIMC's, was utilized for one annual convention designated by the Department of Special Education, TEA.

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*On file Region #5 ALRC (UT at Austin SEIMC)

Table I

Recapitulation Report

TEXAS SYSTEM OF SPECIAL EDUCATION
INSTRUCTIONAL MATERIALS CENTERS
September 1971 -- August 1974

Year	Total Circulation	In-Service:		# Consultative Visits
		# Sessions	# Participants	
1971-72	217,723	822	16,440	3,796
1972-73	246,871	1,245	24,900	10,771
1973-74	266,136	1,355*	27,100*	13,919

* Figures for June-August 1974 are projected

Technical assistance was given to specialized projects carried on through some of the ESC's, for example, the two unique projects dealing with language handicapped children in Regions IV and X; assistance was given, also, to the Houston Independent School District in the development and implementation of the first three Learning Resource Centers in the Houston Plan and in the training of Learning Facilitators.

Conclusions: The State of Texas demonstrated that success in development of a network of associate Special Education Instructional Materials Centers is due to the securing of legislation and funding at the State level. Dr. Robert Montgomery, Assistant Commissioner, and Mr. Don Partridge, Director, Department of Special Education, and Mr. Don Weston, Director of Development and Planning in the Department, the staff of the Department, and the Commissioner of Education are to be commended for their persistent efforts to secure the legislation. The formulation of realistic guidelines for implementation of the SEIMC concept provided the Executive Directors of the Education Service Centers with a viable plan with which to implement the concept. The Executive Directors are to be commended for their full cooperation and for the appointment of well-trained and competent individuals trained to work with handicapped children to fill the positions of Coordinators/ Directors of Special Education. The personnel employed to fill the positions at the SEIMC's are well-trained professionals who have contributed to the success of the operation.

In 1972 plans were drafted to assist the local education agencies in the development of special education resource centers to help organize materials and the delivery of services to teachers and other professionals working at the level of direct contact with learners. A copy of the "Guidelines for Developing and Operating a Special Education Resource System (SERS) in the Local Education Agency", January 1974, is an attachment to the Regional SEIMC Annual Report for 1973-74 (Attachment FS-20).

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In 1968 the Department of Special Education of The University of Texas at Austin designed and offered a course, Special Education 371.4: Special Instructional Media, as a part of the training of students in the special education field. The course has been taught each semester of the long term, since the fall of 1968, and is taught at least once during the summer session.

Minimum standards for a Special Education Curriculum/Materials Specialist certification have been developed; it is hoped that approval of this certification endorsement can be achieved in the next one to two years and training programs designed in order to supply trained personnel to serve in a support position to those involved in appraisal and in remediation.

B. Library

1. Acquisitions

From its inception the UT SEIMC has been service oriented. The library function of the center has had service as its primary goal throughout the eight years of its existence. From its inception the UT SEIMC library has been divided into two parts: professional literature dealing with special education, including teacher resource materials such as curriculum guides, have comprised one part of the library and child-use instructional materials, with their accompanying teacher-oriented materials, have comprised the second part. Emphasis in acquiring materials has always been upon the latter.

In the first two years of the center's existence, approximately 2500 child-use materials were acquired. Over the years, the collection grew to about 11,000 titles, a number which has remained relatively stable during the last three years of the project.

Table II

Instructional Materials Acquisitions

Fiscal Year	Number of Titles Added
1966-1968	2502
1968 1969	1769
1969-1970	1954
1970-1971	1241
1971-1972	2708*
1972-1973	625
1973-1974	1489**

*Some of these were materials deposited by ESC Region XIII on contract.

**Materials deposited by Texas Education Agency.

The stabilizing of the collection at eleven to twelve thousand titles is a reflection of many things: monies available, space available, and decisions concerning the content of the collection. During the early years, emphasis was given to building a basic collection of instructional materials for handicapped children with certain restrictions. No 16mm films were acquired; state-adopted textbooks were not included, and emphasis was on material at the elementary educational level. Since these materials were intended for teacher evaluation, poor materials as well as good ones were acquired.

Changes in content over the funding period resulted from new emphases in the education of exceptional children and in education in general, changes in the availability of certain types of materials, and the extension of age range coverage to early childhood at one end of the scale and to include more secondary material at the other end.

Some types of common, less expensive materials such as puzzles, duplicating masters, blocks, etc. were purchased less frequently during later years when funding for instructional materials at the local level was accomplished and these materials became available to teachers from other sources. Fewer materials which essentially duplicated one another were purchased; that is, if colored inch cubes from six

companies were essentially the same, only one company's product might be purchased as a representative item. More attention was given to large multi-media programs as they began to appear more often on the market. It is interesting to note that at no time did a large proportion of the materials collection consist of materials designed for the handicapped. These materials make up 2 to 3% of the collection.

As the materials collection grew older and larger, materials were withdrawn from it according to established criteria so that the collection would represent the newer material and the more valuable older materials.

The professional collection had as its nucleus a collection of monographs and serials belonging to the Department of Special Education of the University of Texas at Austin. As funds permitted, these were augmented over the years, to keep the collection reasonably up to date, since the philosophy of the Center held that instructional materials, their use, and teacher training concerning them could not exist in a vacuum. Information about methods, trends, and research in special education and, to some extent, in general education, was needed by the Center staff, by teachers using the Center, and as support to pre-service training within the region. Acquisitions of professional literature generally reflected the needs of these groups.

2. Cataloging and Processing

The problems of cataloging and classifying instructional material had to be dealt with almost as soon as the project began. It was decided that a traditional card catalog would not be used; rather, data would be keypunched for computer manipulation. A subject catalog would not be prepared; the information retrieval system to be developed would, it was felt, supply a subject approach to these materials, so descriptive cataloging alone was attempted. A format was developed to make the keypunched data as uniform as possible, both for ease of manipulation by the computer and by the clerical staff

entering the data into the system. Eight elements were used. The first element consisted of up to two personal authors or the corporate author, determined by the Anglo-American Cataloging Code. Element two consisted of the full title of the material, again determined by the Code. Element three was the publisher; element four, the copyright date (publication date was not used); element five consisted of the collation or physical description; and element six was the series title, if any. Element seven consisted of a business entry for each copy of the material; and element eight, which was optional, was used for any notes felt necessary. These were kept to a minimum. The Anglo-American Cataloging Code was adhered to in determing the catalog data, and standard form was used as much as possible, although hardware variations at that point required considerable variations in punctuation used, etc. Elements one, two, three, five, and six were not limited in length since completeness of the data was felt to be essential.

This simplified form of descriptive cataloging proved to be workable for the catalog and for the clerical staff preparing the data. Problems were encountered in production, however. Hardware and funds available and priorities alloted to the handling of large batches of data proved to be almost insurmountable over the years. Only three alphabetical listings by author, title, and series were produced; the first of these appeared three years after the initiation of the project, and the last appeared during the final year. This delay naturally created problems for patrons and staff. The manually produced annotated book catalogs published in 1969 and 1971 and produced in large enough quantities to distribute in the field were of far more value to patrons. The key-punched data was a satisfactory method for handling shelflist and inventory data, however, and provided the bibliographical data necessary for the information retrieval program input.

A traditional card catalog was prepared for the professional literature collection; during the early years

Library of Congress card sets were purchased and original cataloging was done where necessary. Later, original cataloging was done almost entirely with card production done by xerox. As with the instructional materials collection, no subject catalog was produced because indexing for information retrieval was expected to provide subject access. Indexing of professional literature ceased in 1968; a subject catalog was not prepared for the professional catalog because of lack of funds, staff, and other priorities, although its desirability and value are acknowledged. In 1970 a technical assistance team from the IMC-RMC network office recommended that the card catalog be abandoned in favor of a computer-produced catalog. This was tried for one year but abandoned because of the updating problems described above and because patrons preferred to use the card catalog to locate materials.

A classification scheme for instructional materials was felt necessary, since existing schemes did not seem adequate for some types of instructional materials. Content area was selected as the basis rather than handicapping conditions, educational levels, or other bases considered. Eight broad categories were initially established; these were later added to, so that there were eventually eleven categories. These were Language Arts, Social Studies--History and Geography, Health Education, Mathematics, Social Living and Vocational Material, Fine Arts, Perceptual-Motor, Science, Materials for Visually Impaired, Materials for Hearing Impaired, and Bilingual Material. The latter three do not represent content areas but rather modified materials which would be used only with certain groups of learners. To insure ease of application, no finer classification was attempted. Although such a broad classification scheme is less convenient for browsers, it does not require a professionally trained cataloger for its use, and therefore can be applied at any level from the individual school to the regional SEIMC. Modifications are desirable, however; language arts, for example, is a very broad

category that is best narrowed down. For field users being served by mail or other delivery and in conjunction with the detailed subject access allowed by the IRP, such a system is adequate.

The shelf number used for instructional material in the UT SEIMC was a combination of a numerical code for the category, an accession number within the category, and a copy number.

Although processing activities were kept as simple as possible, the nature of instructional materials makes it a fairly detailed process. Each item in a kit must be clearly labeled with the center's identifying information and with the shelf number of that piece of material. Because of the variety of material involved, including paper, wood, steel, plastic, many ways of marking materials were tried and all continued to be used: adhesive labels, rubber stamps, marking pens, ball point pens. It was found useful to prepare a contents list for all boxed materials. In many cases, original packaging of instructional material is not sturdy enough for circulation. Material is sometimes repackaged; sometimes the original packaging is reinforced.

3. Circulation

Circulation figures kept from 1967 through 1969 showed only the number of items circulated to patrons who came into the Center versus the number mailed out to patrons in the field. From 1967 only a punched card was used to record each transaction; it showed the patron's name, due date, and shelf number of the book or material. In 1970 it was felt that more information about the patron was desirable, and codes were instituted to indicate the patron's geographic location and whether he was a teacher, student or faculty or other (this included school support personnel, administrators, associate center personnel, etc.).

In 1968 and 1969 frequency counts were done on materials circulated during the year. These were made available to associate centers to assist them in the selection of materials for their developing collections. Although this

activity was planned for 1970-71, it was not carried out because of expense of production. In the latter years of the project this was not a scheduled activity since the UT SEIMC was no longer involved in direct services to teachers in Texas. It is recommended as a valuable source of information to Centers which do serve teachers directly with materials loan.

Below is a summary of circulation figures by year.

Table III

Fiscal Year	Circulation
1967-1968	22,253
1968-1969	20,984
1969-1970	25,456
1970-1971	42,331
1971-1972	37,591
1972-1973	21,180
1973-1974	18,500

More detailed information is to be found in the Annual Reports of the UT SEIMC. From 1967 on, a significant percentage of the Center's circulation was done through the mail, but the greatest amount was circulated to persons who came into the Center. In 1970-71, circulation increased 60%. During this period, the UT SEIMC served as the materials depository and lending library for the associate center located in Education Service Center Region XIII, which serves Austin and the surrounding counties. To the efforts of the UT SEIMC staff were added the work of the two Region XIII materials consultants, resulting in greater use of materials. All of these data reinforce the consensus of the IMC's that materials need to be as close as possible to the user for the greatest amount of use.

Direct service to teachers in Texas was withdrawn in 1971 when the state system of ASEIMC's became operational. Circulation continued to be high because of the contract arrangement with Region XIII. Mail service was maintained to Arkansas and Oklahoma users. In May, 1971, the Center moved onto the campus of The University of Texas at Austin.

Facilities were better and the Center was much more accessible to students. The UT SEIMC has had a great belief in and commitment to the importance of pre-service training in materials and materials services. Student use of the materials collection increased greatly as the campus became aware of services available, chiefly through tours offered by the UT SEIMC staff to college classes. In 1972-73, almost 80% of materials users were students. In 1973-74, the percentage was still higher. The materials were used for class assignments in compiling lists, evaluating and analyzing materials; in individual tutoring of handicapped children, and in carrying out student teaching activities. This use of materials by UT students emphasizes the importance of making services available at the pre-service level and is reflected in the policies of the ASEIMC's in the region.

4. Other Aspects

Hours of library operation during the first six years of center operation were nine a.m. to nine p.m. with Saturday hours nine a.m. to one p.m. Hours were curtailed during the last two years so that the Center closed at five p.m. each weekday except Wednesday. It was found that after school, evening and weekend hours were most convenient for teachers; afternoon and evening hours were most used by students, and morning hours were little used by either group. Patrons preferred personal assistance in the selection of materials to the use of printed or other tools; thus it is desirable that library personnel have training in or background with materials for the handicapped. Training in the use of the IRP and other tools such as PMRS, Learning Resource Guide, professional indexes and abstracts has been effective in lightening demands made upon Center staff (see training).

A primary service offered was consultation and guidance to Associate Centers in the states of Arkansas, Oklahoma and Texas in the selection of materials and the establishment and operation of materials collection. During

the developmental stages of the four Arkansas centers, materials were selected from the UT SEIMC collection and deposited for long-term loan in the four centers.

After direct services to teachers in Texas were terminated back-up materials service was offered to Associate Centers in Texas where material was unavailable in the Center's collection, as well as reference services by telephone or by mail.

Little has been done with interlibrary loan on a formal basis. As of the termination of the Project, no workable system for the production of union catalogs has been devised, although several abortive attempts have been made within the Texas System of SEIMC's and one current project at Region XX, San Antonio, seems to hold promise. It is anticipated that future development of the network concept will assist in the development of union catalogs and the establishment of formal, efficient interlibrary loan procedures on both the national and intra-state levels.

C. Training

Training was considered a responsibility of field service activities from 1966, when the grant was originally made, until 1971-72 when a training specialist, who assumed the responsibility of training, was employed. Statistics reported under the Associate Center Development (IV.A.) 1966-68 through 1970-71 incorporate figures which report field contacts and training.

The definition of the term "training" as used for the section was "those directed instructions, activities, and/or planned circumstances which contribute to the professional growth of the trainees." The workscope pertaining to training has evolved from a language of general objectives for providing pre-service and in-service training to a language describing the systematic assessment of needs for the client states and the providing of training to meet those needs.

Training activities were in the form of orientation sessions, workshops, class presentations (pre-service and

in-service levels), displays of media and materials, and training packages, both commercially produced and those developed by the Regional SEIMC. Unique workshops were presented in which presenters were not members of the Regional UT SEIMC staff; examples of the latter included the workshop in which the author of the GOALS: Language Development Kit did training, and at the workshop presented by Educational Sciences, Inc., in which participants were trained in the effective utilization of the Behavior Resource Guide and Mainstream Programs.

Activities were developed, or secured, which trained eligible clients in selection, analysis, evaluation, and effective utilization of media, materials, and educational technology; the training was offered at the pre-service, in-service and continuing education levels. Since the Regional UT SEIMC developed an Information Retrieval Program for the matching of child-use materials to learning needs of students, training and packages for training of individuals in the effective utilization of the processes was a chief concern. The Training Section, in conjunction with the Information Retrieval personnel, designed a training package which was produced for use by personnel in special education at the state department levels and at the associate SEIMC's. Modifications and adaptations were made in the group training package as the system changed and as new associate centers were added to the networks in the respective states served by the Regional UT SEIMC. The latter part of 1972-73 an individualized package for training in use of the IRP was designed; production and distribution of the package was made to state departments and associate centers during 1973-74.

Eight training packages were secured from other Centers in the SEIMC/RMC Network during 1971-72 for duplication and distribution to associate centers served by the Regional UT SEIMC; among these were the IMC Engineered Learning Project developed by the University of Oregon SEIMC. Other packages were secured from Michigan State University SEIMC, University

of Kansas SEIMC, Colorado Rocky Mountain SEIMC, and University of Southern California. In addition, the training package for the Annual Training Session of personnel from the Texas System of SEIMC's was prepared in conjunction with the Director, Texas System, and implemented. During this year other instruments devised for use in the training section included the Feedback Form from Participants Who Toured the Regional SEIMC, an Activity Planning Form, the Group Training Package for the Information Retrieval Program Available from the Regional UT SEIMC, a Needs Assessment Questionnaire for Training in the Region, and the duplication of the "Interstate Reading In-service Project" (5 copies) developed by the University of Kansas and the Rocky Mountain SEIMC's. A List of Training Packages Available for Loan from the Regional UT SEIMC was published and distributed to associate centers. Copies of these items are located as attachments in the Annual Report of the Regional SEIMC for 1971-72.

The training package for the Annual Training Session of personnel of the Texas System of SEIMC's was prepared in conjunction with the Director, Texas System, and implemented June 12-14, 1973. A summary of the evaluation of the Modular Sessions and a summary of the Content Evaluation of the Session are attachments of the Training Package in the Annual Report (1972-73) of the Regional UT SEIMC. One other package was disseminated to associate centers in the Texas System and was Outlines for In-service Presentations for Specific Instructional Materials; these were developed by participants at the Annual Training Session and compiled, duplicated and distributed by the Regional UT SEIMC. Three other packages were formulated but were not produced and distributed until 1973-74; these were the System for Instructional Materials Evaluation Retrieval Training Package, the Selection and Utilization of Instructional Materials, and the SELECTO Game (adapted from the Rocky Mountain SEIMC Selecto Game).

The products of the training section for the 1973-74 scholastic year included the three packages cited above plus a Behavior Modification Audio-Visual Directory; Directory of Training Materials (Annotated), and the Training Package for the Annual Training Session of personnel in the Texas System of SEIMC's. Copies of these attachments are located in the Regional UT SEIMC Annual Report for 1973-74. The number of training packages in the holdings increased from sixty-one in 1972 to one hundred-thirteen in 1974; more packages than this were acquired or developed for inclusion in the holdings, however, as items became obsolete they were removed from the collection.

Evaluation of training was given priority; feedback was primarily subjective and was used by those involved in the training process to refine their skills. No systematic objective evaluations have been used consistently to assess the effectiveness of the effort. Subjective assessments were regularly implemented and reflected a positive reception from trainees. Examples of some of the evaluations made were: Evaluation of the Information Retrieval Program, Needs Assessment of Training Needs, Evaluation of the TIP, Cost Evaluation, Users' Survey (Arkansas in 1973; Region in 1974), Evaluation of Annual Training Sessions of the Texas System of SEIMC's, etc.

Training activities for personnel in each of the three states served were planned annually with the Field Directors responsible for the state networks of associate SEIMC's; the planned activities and the numbers of individuals who participated are indicated in the Annual Reports of the Regional UT SEIMC for 1971-74. A recapitulation of numbers of individuals served indicates:

Table IV

Individuals Served by Training Division

Year	Arkansas	Oklahoma	Texas	Out of Region	Total
1971-72	7	95	2460	51	2613
1972-73	128	5	795	-	928
1973-74	230	355	590	-	1175
Totals	365	455	3845	51	4716

The above statistics report only the training contacts made by the professional staff of the Regional UT SEIMC and do not reflect the large numbers of individuals involved in training programs offered by the associate centers in the networks of each of the three states in the Region (this information has not been available).

Annual Training Sessions were planned and implemented in conjunction with the Director, Texas System of SEIMC's; copies of the training packages and accompanying evaluation reports are attached to the Regional SEIMC Annual Reports for the years 1970-71 through 1973-74.

The concept of the training format has changed through the grant period; initially training was offered directly to teachers and other professionals in the field, when the request was processed through proper channels. After the directive from BEH in 1969, direct services to teachers were phased out and the emphasis was upon services offered to the associate SEIMC's through the State Department of Education. As associate centers developed, training accomplished by the Regional UT SEIMC had a "multiplier" effect to personnel through the associate centers. In addition, the associate centers provided training for their clients which was highly specific to their expressed needs.

Conclusions: The training section has performed a substantial role in affecting services to handicapped children and youth through in-service, pre-service, and continuing education services as well as through the development and dissemination of training packages; this can be substantiated through the numbers of individuals (4,716) who have participated in the activities offered by the professional staff of the Regional UT SEIMC from 1971-72 through 1973-74. Training activities offered prior to 1971-72 are contained in the statistics reported under Associate Center Development, when training activities were offered directly to teachers in the field. The figure reported above was for training activities provided

through the state department of education and the associate centers where the "multiplier" effect was built in. Evaluations, most of which were subjective, have afforded data to the trainers for modifications and adaptations of topics and techniques; data which is objective to substantiate growth in competencies of individuals trained is not available.

Some problems which were encountered in delivering services in the area of training were the lack of in depth needs assessment prior to training, the lack of formulation at all times of competency-based in-service training, the inability to accomplish long range planning for training in cooperation with the states' field directors often due to constraints put upon them by other responsibilities and by not being able to respond for the associate centers in their respective networks, and an unclear delineation of the field directors' roles, obligations, and responsibilities to their respective states and to the Regional SEIMC. Some of these problems might have been alleviated through a national training conference of all Regional SEIMC staffs in order to facilitate an effective plan for delivery of services, an inter-IMC coordination on specific thrust areas, and prior knowledge of funding allocation for the specific strategies to be implemented by the training section. Perhaps through the experiences of the SEIMC's, a more comprehensive plan for delivery of services to associate centers can be formulated by the Area Learning Resource Center/National Center for Educational Media and Materials for the Handicapped (ALRC/NCEMMH) Network as it is implemented in September of 1974.

D. Information Dissemination

1. Information Retrieval Program

a. Development of the UT SEIMC Instructional Materials Information Retrieval System

The institution of an Information Retrieval System was one of the functions assigned to the University of Texas Special Education Instructional Materials Center (SEIMC) by the terms of its original grant awarded by BEH in 1966. During the first year of its operation (FY 1967),

investigations were begun and plans formulated for operating such a system. In determining goals to be attained, it was decided that the system should be an interactive one to enable direct use by classroom teachers; that all pertinent data regarding both professional texts and instructional materials should be included in the data base; and that such information should be provided, upon request, to those professionals in the UT SEIMC service area of Texas, Oklahoma, Louisiana, and Arkansas who worked with the handicapped learner, as well as to National IMC/RMC Network. The State of Louisiana was removed from the UT SEIMC service area in FY 1971.

In seeking the best ways to accomplish these aims, the UT SEIMC hired, as consultants, librarians and computer experts to suggest appropriate methods of creating a Special Education Instructional Materials data base. The ERIC format and Thesaurus were patently suitable for preparing professional materials for entry. However, it was determined that there was no existing system which accomodated itself to the preparation of instructional materials. A prototype system was suggested involving the selection of a small universe of instructional materials, the preparation of abstracts concerning those materials patterned after the ERIC format, and the creation of a thesaurus of such terms as would be necessary to describe the materials chosen.

Twenty-nine instructional materials were chosen for inclusion in the prototype, and the bibliographic data, abstracts, and descriptive terms were keypunched and fed into the computer using a program developed at the UT SEIMC for this purpose. Cost analysis of the result indicated that, while the program produced the required output, the cost of including so much data was prohibitive in terms of computer time, transmittal time, and maintenance of the data base itself. It was therefore decided to omit the abstract from the data base and to include only that information required to identify the material and refer the user to the appropriate abstracts. These

abstracts would be housed in associate centers throughout the service area in the form of microfilm.

Hardware originally utilized in the retrieval system consisted of the Control Data Corporation (CDC) 6600 computer housed at the Computation Center on the main campus at The University of Texas at Austin, a Western Union model 35ASR teletype on a voice grade telephone line from the SEIMC to the Computation Center, magnetic tapes for permanent storage of data, an IBM keypunch, and a Recordak microfilm reader-printer. A Western Union model 33 teletype linked the UT SEIMC with the Regional SEIMC at the University of Kentucky and with Associate Special Education Instructional Materials Centers (ASEIMC's). A CDC 6400 computer was added to the Computation Center in 1971 and is now in use by the Information Retrieval System.

During FY 1968, abstracting and indexing of both professional and instructional materials was begun. Using the ERIC Professional Materials Thesaurus as a source for descriptors, approximately 1200 professional materials were processed and the abstracts sent to ERIC-CEC for inclusion in their data base. Since there were many terms needed for indexing instructional materials that were not included in the ERIC Thesaurus, UT SEIMC developed an Instructional Materials Thesaurus for its own use, and indexed and abstracted approximately 200 items of instructional material. Microfilm cartridges on all materials abstracted were prepared and distributed to other SEIMC's. Other software resulting from the program included inverted files of professional books, instructional materials, and ERIC documents concerning exceptional children; Thesauri for each of the inverted files; and library printouts of the instructional materials which had been abstracted. An additional 1000 instructional materials were abstracted during FY 1969. At the end of FY 1968 the abstracting of professional documents was discontinued permanently. It was felt by the staff of UT SEIMC that the abstracting of professional materials

was a duplication of the efforts of other IMC/s and ERIC-CEC. During FY 1970, the format used for describing instructional materials was changed from a two-page abstracting form to a one-page annotation form.

The new format selected for compiling data included bibliographic information, a list of applicable indexing terms called "descriptors", and an annotation for each item selected for inclusion in the data base. The data base was updated to conform with the revised format. Again, because of space limitations imposed by the computer and time and cost considerations, full text of the new data sheets was not included in the data base. The base itself consisted of microfilm numbers corresponding to the data sheet, UT SEIMC accession numbers, and descriptors assigned to the text of material. Titles of the items were later included. Full text of the data sheets were reproduced on microfilm and made available to Regional SEIMC's for use by their clients upon receipt of computer response. Two thousand instructional materials were annotated in that year, and the existing software was updated. By the end of FY 1971, the data base had grown to include 4999 items of instructional material. Field reports received during FY 1970 and 1971 had provided considerable evidence that the microfilmed data were receiving minimal usage. This information, combined with the need to increase rapidly the size of the data base, caused the discontinuation of annotating when the data base reached 6,000 items, and the cessation of microfilming at that point. The data base itself grew to 10,000 items of instructional material during FY 1972.

The most recent complete revision of the information retrieval program took place during the period June 1972 - July 1973 and involved various operations:

(1) The existing thesaurus (Information Retrieval Program User's Handbook) was renamed and completely revised.

(a) 109 terms were deleted and

217 new terms added to bring the total number of acceptable identifiers to 528.

(b) Definitions or "scope notes" were prepared for all terms included.

(c) Terms were reclassified into categories matching the Information Retrieval Request Form.

(d) Appendices were added to further explain terminology and software available for the system.

(2) The Information Retrieval Request Form was revised so that it became a single sheet printed on only one side and eliminated sample retrieval terms which were confusing to the user.

(3) Software items, such as inverted files, microfilmed annotations, and high frequency requests, which were receiving minimal field usage, were eliminated.

(4) A new retrieval program was selected, with the help of consultants, which would better meet the needs of the Information Retrieval Program.

(a) System 2000, a commercially available computer program, eliminated the necessity for a staff programmer.

(b) Being more flexible, System 2000 allows constant change in data without major revisions of the program or great amounts of staff time.

(5) The instructional materials in the existing data base were examined and the system purged of those which failed to meet criteria established for inclusion in the new base. Approximately 4000 items were eliminated or consolidated with remaining materials.

(6) All remaining instructional materials were reindexed according to the new Thesaurus and annotated.

(7) Data regarding these instructional materials were keypunched according to the format demanded by the new program.

(8) Additional new instructional materials were borrowed from vendors for the purpose of preview, and data concerning them processed. As of the end of FY 1974, the data base consists of 7778 items of annotated instructional material.

(9) All data were printed and distributed to ASEIMC's in Texas, Arkansas, and Oklahoma and to Regional SEIMC's in Colorado, Kentucky, and Illinois, as well as the RRC in New Mexico, and the NCEMMH.

Growth of the data base and development of the ASEIMC's made desirable the creation during FY 1972 of a training package designed to familiarize the staffs of both ASEIMC's and local education agencies (LEA's) with the mechanics and proper use of the Information Retrieval System. This package was designed for use with large groups and consisted of a slide tape presentation, transparencies, and a leader's manual. An additional, smaller training package was developed during FY 1973. It consisted of a notebook of instructional material with a cassette recording designed for use by individuals who had received no training in use of the program, but who wished to submit an information retrieval request. Workshops using these packages were conducted by UT SEIMC personnel throughout the service region and left for use by their staffs for subsequent field training of their clients. These training packages were utilized by ASEIMC's during FY 1973. From this experience these training packages were revised early in FY 1974 to reflect changes in the Thesaurus and the request form and to incorporate additional information for clarification.

Despite limited funding available for development and operation of the retrieval system, UT SEIMC has processed ever-increasing numbers of request as indicated by charts submitted in previous annual reports. Expansion of the service area never was actively promoted though requests from SEIMC's outside the service area have been received and processed. Most of these have come from the SEIMC at the

University of Kentucky, though several hundred also have been received from the RRC in Las Cruces, New Mexico. Few of the other National IMC/RMC's have availed themselves of this service.

A draft of a proposal was prepared for expansion of the IRP and its development into a national system in February 1973. Copies of the proposal were mailed to Dr. Paul Andereck, IMC/RMC Project Officer and Dr. Don Erickson, Director, IMC/RMC Network office on February 12, 1973. Also copies of the proposal were made available to the Directors of all IMC/RMC Centers at the Directors' meeting in Dallas, March 6, 1973. The IMC/RMC directors decided that further investigation of the needs of the national retrieval system was required prior to proceeding with development of any existing system. This action has precluded further development of the retrieval system at the UT SEIMC. However, the system has remained in an operational mode since that date.

b. Present Operation of the Information Retrieval System

The UT SEIMC Information Retrieval System presently operates from a 7778 item data base using the hardware described earlier in this report. Of the software developed during the formative years of the system, the following are now in use: (1) A User's Handbook and Thesaurus, 1973 edition, which includes a brief introduction to the system, a copy of the user's request form, a sample request and the retrieval response it generated, and the Thesaurus. The Thesaurus is divided into sections listing terms appropriate for educational levels, content areas, skill terms, format, disability areas, and an alphabetical listing of all accepted terms with their definitions.

(2) Printed copies of the annotations and bibliographical data for all instructional materials included in the retrieval system. A numerical index is included.

(3) Frequency count which indicates the number of times each descriptor has been used in indexing instructional materials.

(4) An alphabetical listing by title of all instructional materials in the system.

(5) A large training package which contains a slide tape presentation with script, sample retrieval problems on transparencies, and a guide for the workshop leader. This material is designed for group presentation.

(6) A small training package consisting of a notebook of explanatory information with a cassette recording. This package is designed for individual use.

The staff responsible for the maintenance of the Information Retrieval System consists of a coordinator, a retrieval specialist, and a TWX operator. Ancillary personnel who are shared with other UT SEIMC divisions include a secretary and a keypunch operator.

The procedure for processing materials for inclusion in the data base is:

(1) Material is borrowed from vendors for a 30 day examination period by the Information Retrieval Coordinator.

(2) The materials are examined by the coordinator, bibliographic data recorded, descriptors assigned, and annotations written. The material is then returned to the vendor.

(3) The data sheet is typed, verified by the retrieval specialist, and then assigned a number in sequence.

(4) The data sheet is then sent to keypunch and the resulting cards fed into an IBM 407 accounting machine which provides a printout of the data.

(5) The printout is verified by the retrieval specialist and keypunch operator.

(6) Necessary corrections are made on cards, bibliographic data, and printout.

(7) The completed program cards are delivered to the coordinator who turns them over to the retrieval specialist.

(8) The retrieval specialist processes the cards at the computation center.

(9) The resulting printout is verified by the retrieval specialist.

(10) Necessary corrections, if any, are made and data incorporated into operating data base in increments of 400.

(11) As data base is increased, all software affected by the increase is updated.

The procedure for processing a request for instructional materials is as follows:

(1) Descriptors applicable to the learning situation for which materials are needed are selected by the client from the Thesaurus section of the User's Handbook.

(2) These terms are listed on the Information Retrieval Request Form and are sent to UT SEIMC by mail, phone, or TWX by the associate SEIMC serving the client.

(3) The descriptors are fed into the computer by the retrieval specialist.

(4) The response is returned via the teletype terminal to UT SEIMC in the form of a printout which indicates materials file number and title of the material. This response is duplicated for the UT files.

(5) If the response is to be returned to the associate center by TWX, a TWX tape is cut; otherwise the computer printout is returned to the center by first class mail. The alternate methods of receiving requests and sending responses and the times involved are indicated in Table 1.

c. Recommendations for further development of the Retrieval System

(1) Size of Information Base

Several factors need to be considered in regard to the ultimate (or optimum) size of the data base: (Data base = number of descriptors used to code all materials +

title + MF numbers + publisher or series + date). As the size of the base increases, all retrieval and update operations become more time consuming, hence, more expensive, for several reasons. A larger base requires the computer to search longer for descriptor, longer requests (more descriptors per request) require more processing time, larger base produces longer printouts, longer jobs receive lower priority ratings at the Computation Center, and lower priority jobs require more staff time here, as the computer technician is engaged in waiting for output rather than inputting requests.

A large base has no particular value of itself. Its size should be carefully tailored to meet the needs of the region it serves. Quantity is still no substitute for quality. Therefore, materials should be purged according to established criteria, and materials should be added according to established criteria. Further non-selective inclusion of materials does not appear to be advisable.

(2) Preview

Criteria for selection of materials for preview should roughly parallel those listed in the Operations Manual prepared by Task Force III. These take into account the following factors: (a) The number of materials in the system by content area, grade level (reading level), interest level, skill areas, input-output characteristics, (b) The number of requests for materials information, both filled and unfilled, in the above categories. Attention to these factors would insure responsiveness of the information system both to demand from the field and to the maintenance of a "balanced" data base.

New materials should be ordered for preview on a year-round basis from commercial producers except during that (those) time/s when the information base specialist is engaged in selecting materials to be purged from the system. If sufficient staff is available, the two activities could be carried on concurrently.

An up-to-date catalogue file should be maintained for this purpose and for the purpose of providing information for preparation of data sheets. Catalogues should be marked to indicate materials which have been ordered for preview and the date they were selected. It would also be helpful to indicate those that arrived, those which were included in the system, and those which were rejected. Attention to this kind of detail would prevent materials from being looked at more than once, and would provide a means of checking back should a question arise regarding the return of material to producers or the number of materials from a producer included in the system. (As of 8/16/74, there is no way to retrieve a listing of material by producer).

(3) Inclusion

Formal, written criteria should be developed regarding which of the previewed material should be included in the system. Attention should be given to those criteria (if any) established by the National System. Other factors to be considered might include new or newly emphasized areas of the curriculum or levels of instruction (Career Education, Early Childhood), demand from the field, and maintenance of adequate numbers of materials in the areas of established demand (reading, math, perception).

Preparation of data for inclusion in the data base can be handled by one professional staff member at the rate of at least 100 items a month provided efficient clerical help is easily available. Preparation of lists of materials to be ordered, check-off of materials when they arrive, typing and proofing of data sheets, mailing of materials back to producers, and maintenance of simple records regarding receipt and return of materials are regarded as clerical rather than professional duties. Experience has shown such duties best performed by individual staff members solely responsible in that area. (Information retrieval needs a clerical person directly responsible to the information base special-

ist).

(4) Quality Control

The Information Base Specialist should view and approve all typed copy (returned with the original document) before any data is keypunched or duplicated, or before any original copy of a data sheet is destroyed. Much inaccuracy has resulted in the past because responsibility for the completed product was dispersed, because the pressures of time did not allow proper care to be taken in checking for accuracy, because original documents were destroyed before they were checked against typed copy, because routine procedures for the production of data were not established. Much of the problem existed because there were no real precedents for our operation. This excuse no longer exists.

(5) Update

Keypunched data may be added to the data base in batches of 250-400 items, or routinely added monthly, quarterly, semi-annually, or annually despite the number available. Batches of 400 items have recently proved efficient and satisfactory under the present operating conditions.

(6) Printing of Annotations

The number and frequency of additions to the base affect the distribution of annotations to the field. The optimum number of folders that can be handled efficiently by Steno has proven to be 5. This is approximately 250 items of material. Five folders can be reproduced in 7 - 14 days, depending upon their workload. Production of these annotations should not fall behind additions to base or the field does not have access to annotations matching retrieval responses.

(7) Deletion of Items of Instructional Material From Base

At a given time during the year (probably April - June or quarterly), a printout should

be generated listing alphabetically all materials which are older than 5 years. These materials should be reevaluated on the basis of:

- Frequency of usage in the field
- Materials evaluation
- Professional judgment regarding educational value
- Unique characteristics
- Revisions
- Availability
- Number of similar newer materials available
- Number of same type of materials included in the IRP
- Etc.

(8) Update of Annotation File

Those materials which fail to measure up to established criteria should then be purged and ESC/SELMCs provided with a list of deleted materials so that they may withdraw and destroy annotations for them from their files. This operation may be accomplished very simply by marking deleted items off the numerical index and circulating the marked index.

(9) Scheduling

The purging operation should be complete and the marked index circulated no later than July of any year, if done annually, or the first month of the succeeding quarter, if done quarterly.

(10) Undated Items (those marked NA on the data sheets) should also be reevaluated on the same basis. Initially this may be done folder by folder, since there is currently no way to generate a computer printout of these materials. In the future, it might be wise to highlight a copy of the numerical index to indicate those items with no publishing date and keep it up to date, thus obviating the necessity to handle every folder every time deletions were considered.

(11) Deleted Microfilm Numbers

It is recommended that MF numbers of deleted materials not be "reused". In other words, that no attempt be made to go back and fill in using the numbers

from the deleted materials. This means that an accurate count of deletions and additions must be maintained so that the computer retrieval technician will have an accurate item count for the data base. (Remember that the computer counts items of data, not items of instructional material).

(12) Number of Deletions

The number of items of instructional materials deleted at a given time should be dependent upon the number of items added to the base during the previous period or the number projected for the coming period if it is decided to maintain the base at a relatively constant level.

(13) Data Correction

Corrections which need to be made in the data base should be organized so that the retrieval technician can make all changes of a similar nature at the same time. For example, all deletion of incorrect or inappropriate descriptors from materials should be done at one time; addition of descriptors overlooked or newly added to the Thesaurus should be done at one time. The reason for this is that each type of change requires use of a particular "mode" by the retrieval specialist. Switching back and forth between modes is complicated, time consuming, and expensive. All corrections made on-line should be made on the keypunched cards also.

(14) Changes in the Thesaurus

The Thesaurus should not be thought of as a finished document. It reflects the mental set of the professionals involved in its construction, although every attempt was made to create a balanced, impersonal set of descriptors. It is not recommended, however, that changes in the Thesaurus be made more frequently than annually. To do so would not only confuse the persons responsible for indexing and retrieving, but would cause users to question the validity of the document.

Neither is it recommended that the Texas Thesaurus be completely updated to reflect the terms

used in the National Thesuarus. This system is now a "solely owned corporation" as it were, and as such, does not need to conform to the national document. At such time as a national system comes into being, Texas will have to either fund the IRP out of state funds in order to continue its operation, or dismantle the system and use the documentation and services of the national system. Neither course of action would require conformance of the Texas Thesaurus to the National Thesaurus. Consideration should be given, however, when additions to the Thesaurus are made, to the terms in the National Thesaurus.

The person responsible for indexing should keep marginal notes in his Thesaurus regarding suggested additions, deletions, or changes in terms, as well as definitions for new terms and reasons for needing them. If such notes are not kept, the terms will be forgotten as will their justification.

When changes are considered, the content areas of career education, speech, vocational, and conceptual/perceptual should be examined. These are probabl- the weakest areas. Language arts is the most heavily used category and is not totally satisfactory. Addition of process terms or input-output terms might be considered, but these need to be considered in the light of user competency as well as the proficiency and training of the staff member/s who index materials.

(15) Records Regarding Usage of IRP

It is strongly recommended that the administrative officer/s of the ALRC decide at the outset of the contract what type of records will be needed.

It is strongly recommended that minimal records be required of the regional ALRC. Some distinct and expanded responsibility for record keeping should be required of the local ALRCs. Authority now exists. The IRP has amply justified its existence. Recording of minute detail should no longer be necessary.

If time/cost studies or other evaluations are needed, these should be done at discrete intervals and not be on-going operations.

2. Dissemination Documents

Communication of information concerning functions and services of the Regional UT SEIMC was a prime consideration; visuals were prepared for use in orientation sessions to the overview of the Center. As the concept evolved as the support factor to the embryonic networks of associate SEIMCs, the presentations were modified to embrace the objectives which were adapted to better meet the needs.

Documents used for dissemination purposes included lists of materials, and ultimately catalogs of instructional materials in the holdings; catalogs of the professional books collection; newsletters; brochures; specialized reading lists and bibliographies; training packages; working papers; and reports concerning evaluation and research.

Lists of child-use media and materials, annotated, were prepared from the time of initial acquisitions and shared through direct services to the teachers in the field. A List of Instructional Materials Suggested for Use with Exceptional Children and Youth was mimeographed and circulated in 1968 (5,000 copies); a copy is included as an attachment, FS, in the 1966-68 Annual Report. The 1969 publication, Instructional Materials and Resource Materials Available to Teachers of Exceptional Children and Youth, had an initial printing of 6,000 copies; reprinting of the catalog resulted in an additional 6,000 copies. The Addendum to the original catalog was printed in 1972 and 5,000 copies were printed and distributed. Copies of the catalogs are located as attachments to Annual Reports of the Regional UT SEIMC for 1968-69 and 1971-72.

A Newsletter was initiated during 1967-68 to apprise professionals of the services to the field from the Regional UT SEIMC; three issues were prepared with 14,000 copies (total) published. The mailing list of eligible users who had

prepared and submitted application forms for membership was 4,910. In 1968 an Editor was employed on a part-time basis to prepare copy for the newsletter which was named the Descriptor. During 1968-69 five issues of the newsletter were prepared with 28,000 copies being printed (total); the mailing list indicated at the close of the year that 6,283 individuals were eligible users. Five issues of the Descriptor were prepared in 1969-70 with a printing of 45,000 copies (total); the mailing list reflected 8,203 eligible users. Four issues of the newsletter were printed during 1970-71 when the mailing list was greater than 10,000. The newsletter was discontinued from the Regional UT SEIMC as of September 1, 1971, since the associate centers were publishing their own newsletters. Since 1971-72 newsletters have been prepared and published for the Arkansas SEIMC Network and the Texas System of SEIMCs; copies of the newsletters are attached to each of the Annual Reports of the Regional SEIMC. One of the chief purposes of the newsletters was to provide information from the SEIMC/RMC Network to the associate centers.

Brochures were used to disseminate information throughout the region; the Regional UT SEIMC had had three brochures concerning its activities designed and distributed and copies are attached to the Annual Reports. Brochures have been prepared the last three years (1971-72 -- 1973-74) for distribution by the Arkansas SEIMC, the Network of Oklahoma associate centers the last two years, and the Texas System of SEIMCs the last three years.

Catalogs of professional holdings were prepared and circulated to associate centers; many used this information to acquire beginning holdings for their centers.

Specialized reading lists and bibliographies were prepared for dissemination to participants in the field and related to the categorical areas, content areas, parents' readings, high interest-low vocabulary reading materials, etc.; preparation of reading lists were outgrowths of requests from

the field and from the associate centers.

Training packages which were developed at the Regional UT SEIMC were disseminated; periodical printing of directories of training materials available for loan were made available to the state departments of education and the personnel of the associate centers. Further information concerning the items disseminated can be located in the section pertaining to training, IV.C., above.

Other dissemination documents were the working papers which were developed primarily by the research and evaluation component. In addition, reports of research accomplished and evaluation of various activities are referenced in other sections of this document.

Conclusions:

A vital function of the Regional UT SEIMC was the dissemination process. Information concerning the functions and services offered needed to be disseminated on an ongoing basis due to attrition of personnel in the field and new professionals who entered to replace them, as well as professionals added who were relating to handicapped children and youth.

Regional Special Education
Instructional Materials Center
The University of Texas at Austin

Table V

Recapitulation Report
Field Services, 1966-74

Year	State	Personnel Served: Adm.	S. E. Tchrs.	Reg. Tchrs.	Sup.	Prof.	Col/U Stu.	Parents	Anc. Personnel	Gen. Aud.	SEIMC Personnel	TOTAL
1966-67:	Arkansas	20										20
	Louisiana	15										15
	Oklahoma	20										20
	Texas	743	2602				736			339		4475
	TOTALS	798	2602				736			339		4530
1967-68:	Arkansas	15	100							10		125
	Louisiana	55	374				20			25		474
	Oklahoma	43	364				195					602
	Texas	787	3921				873			200		5781
	TOTALS	900	4759				1088			235		6982
1968-69:	Arkansas	5	207	19					8			239
	Louisiana	33	267	10			5		20			333
	Oklahoma		361	247		32						640
	Texas	1474	5492	939		72	829	213	119			9158
	TOTALS	1512	6327	1233		104	834	213	147			10370

FIELD SERVICE, 1966-1974 (Continued)

Year	State	Personnel Served: Adm.	S. E. Tchrs.	Reg. Tchrs.	Sup.	Prof.	Col/U Stu.	Parents	Anc. Personnel	Gen. Aud.	SEIMC Personnel	TOTAL
1969-70	Arkansas	2										2
	Louisiana	385	350	75		30	50		105			995
	Oklahoma	32	46									78
	Texas	1735	3204	1165		204	694	433	421			7852
	TOTALS	2154	3600	1236		234	744	433	526			8927
1970-71	Arkansas	25	246	96		17	148		9			541
	Louisiana	2	5									7
	Oklahoma	2	16	74								92
	Texas (Booker)	443	3042	1530		54	467		29	358		5923
	Outside Reg.	13				15	5			1		34
	TOTALS	485	3309	1700		86	620		38	359		6597
1971-72:	Arkansas (Bailey employed 6/1/70; resigned 1/15/71. Pace employed 4/1/71.)											
	Arkansas	171	589	75	24	44	467		2	6		1412
	Oklahoma	134	431	36	55	11	115			1872	236	2890
	Texas (Booker)	258	1434	570	69	78	163		34	20	227	2853
	Outside Reg.	1										1
	TOTALS	564	2454	681	148	133	745		36	1898	497	7156

8/18/82

FIELD SERVICES, 1966-1974 (Continued)

Year	State	Personnel Served: Adm.	S. E. Tchrs.	Reg. Tchrs.	Sup.	Prof.	Col/U Stu.	Parents	Anc. Personnel	Gen. Aud.	SEIMC Personnel	TOTAL
	Arkansas (Pace resigned 7/31/73; Sydoriak employed 8/1/73).											
1972-73:	Arkansas	249	596	274	38	134	763		24	1658	58	3794
	Oklahoma	101	587	49	58	29	473			3794	142	5233
	Texas (Booker)	114	269	49	104	26	14		1	1843	313	2733
	Outside Reg.	25	10	3	3					138	27	205
	TOTALS	489	1462	375	202	189	1250		25	7433	540	11965
1973-74:	Arkansas	431	1038	485	108	61	522		13	275	266	3199
	Oklahoma	138	344	27	118	26	673		252	1939	516	4033
	Texas (Booker)	122	267	30	84	54			78	133	214	982
	TOTALS	691	1649	542	310	141	1195		343	2347	996	8214

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V. RESEARCH/EVALUATION

The services provided by the Research and Evaluation Division during the eight year funding period may be categorized into materials evaluation, internal project monitoring and investigatory thrusts. Activities carried out under these categories will be discussed below. Abstracts of all reports related to this discussion follow this section of the report. Complete reports are available at the Texas ALRC or may be found in UT SEIMC annual reports.

A. Materials Evaluation

The value of materials evaluation was recognized as a priority for the UT SEIMC at its inception. Early efforts focused on the development of an evaluation system which used as its major resource the UT SEIMC Committee of Consultants. Special Education Supervisors, classroom teachers and content area specialists were listed among those who served on the committee. The committee's main function in serving as a resource to this activity was to evaluate instructional materials that had been purchased by the Center. Information was subsequently disseminated in the form of special bibliographies.

Early positions relative to materials evaluation are set forth in Research Report R2.4. In 1968 the UT SEIMC began to establish a model for the evaluation of instructional materials. A necessity for this activity was clearly recognized. The inclusion of teachers in this process was seen as being critical. The proposed model suggested that research activities (identification of a problem, data gathering, analysis and interpretation) should be utilized when executing a materials evaluation study. The results of the research were to be applied to the judgment that is made regarding the value of the material.

An early activity associated with the evaluation effort was the development of an instrument to gather instructional materials evaluation information. The initial form was a checklist which was manually scored. In FY 72 this form was

revised. Terminology was changed to bring it into line with the current terms used in special education. The form also was transformed into a machine readable Digitak Optical Scanning instrument, which allowed for more efficient data tabulation.

The form was responsive to a critical concern in materials evaluation. It was seen as inappropriate to indicate, as a result of evaluation efforts, that a material is good or bad without providing some index of the conditions under which the material was utilized. Thus, the instrument that was developed by the UT SEIMC staff allowed for the gathering of both demographic and evaluative information. Teacher evaluators first described themselves, their instructional environment and the handicapped learner with whom the material was used and then completed the evaluative items of the instrument. Extensive discussion of this effort may be found in Research Report numbers R2.5, R2.6, R2.7, R2.8, and R2.9.

A final thrust which was related to materials evaluation was the development of an instructional materials evaluation information system. The System for Instructional Materials Evaluation Retrieval (SIMER) was developed to meet the need for evaluative information to serve the teacher's decision process relative to materials selection. The philosophy underlying SIMER asserted that it is inappropriate to say a material is good or bad without indicating the conditions under which the material was used. There are certain contingency relationships between the worth of the material and the conditions-of-use associated with its implementation.

SIMER had as its data base both demographic and evaluative information. The system is an interactive one where the user inputs the title of the material and employs conditions-of-use as descriptors to complete the search. The result is a response that is an evaluation of the target material that is related to the situation in which it is going to be utilized.

The following objectives are provided as a succinct

description of project intent. They are divided so as to correspond with specific phases of the project time line.

Phase I - Project Planning August 1-August 31, 1973

1. During the designated period all staff positions were defined and filled.

2. An evaluation design was developed which served as both a formative monitor and a summative judge.

3. User request forms were developed, reproduced, and field tested to determine the most efficient and economic method of handling this phase of the process.

4. The in-house request process was evaluated during the initial phase. This included both man and computer processing.

5. The project was delineated and disseminated to participating ESC's in an effort to familiarize them with the strategies and proposed outcomes of the project.

Phase II - Project Execution September 1-September 30, 1973

1. The project was placed in operation in 19 ESC's in the State of Texas.

2. During the Project Execution period requests were processed.

3. Turnaround time for the complete request process (ESC to UT SEIMC to ESC) was approximately five days if U.S. mail were used for both input and output of request.

4. Users of the system were asked to evaluate the UT SEIMC response in such areas as information content and processing time. The evaluation instrument was developed during Phase I of the project.

5. In addition to written evaluation a random sample of users was asked to respond to a structured telephone evaluation interview.

Phase III - Project Evaluation and Dissemination

October 1-October 31, 1973

1. According to the evaluation design formulated in Phase I the project's worth was assessed. Projected criteria

were delineated in the main body of the proposal.

2. Subsequent to data analyses and write-up a final report was submitted through ESC, Region XII to the Texas Education Agency (TEA) - Special Education Department.

3. Following TEA approval the report was distributed to all participating ESC's for regional dissemination.

The reader is refered to Research reports 2.7 and 2.8 for an extensive discussion of activities associated with the thrust. These are available through the TALRC.

B. Monitoring Activities

A major effort was expended on behalf of the monitoring of UT SEIMC services. Primary focus was on the evaluation of the Information Retrieval Program (IRP) which was in its developmental phases throughout the tenure of the Research and Evaluation Division. Additional monitoring centered on Library and Services. For extensive review of the monitoring activities the reader is refered to Research reports 1.1 through 1.11; 2.1 through 2.10; and 3.1 through 3.3.

1. Information Retrieval Program

A three phase monitoring system was utilized to evaluate the retrieval program. These phases correspond to the components of any system: Input, Process and Output.

a. Input

Phase I focused on the evaluation of user requests for materials information. These requests were reviewed to determine the extent to which appropriate terminology was utilized and to index the completeness of the requests. Results of these initial efforts suggested that training activities had to be developed to increase the level of sophistication of the person making the request.

Additional input monitoring information which addresses the use of the IRP is set forth in section IV (Services) of this Final Report.

b. Process

In-house turnaround activities are

always a primary focus of any systems analysis. The monitoring activities focused on time and cost factors associated with the processing of a request.

The cost per retrieval averaged $2.88. This figure includes staff, computer and TWX time and processing materials such as TWX tapes, files, and reproduction.

The average in-house processing time was one day or less. The processing time may be inflated by two factors. These are batching and request modification. Briefly, batching occurs when a local center holds user requests until a certain number are built up or when an individual requestor submits several (ranging at times, up to 100 or more) requests at one time. Batching causes a temporary overload on the system and results in an extended time frame.

A second factor which was identified as disruptive of the in-house processing was request modification. Approximately 38% of the incoming requests were formulated in a way that made it impossible to complete a search. Five percent of these were rejected outright, while 33% had to be modified before they could be run. This resulted in considerable lost processing time.

Additional monitoring information relative to processing can be found later in this section under "Field Services".

c. Output

In the third monitoring phase, user evaluation of the IRP was obtained. These evaluations turned out to be overwhelmingly positive with the exception of one very important variable. Once they received the information responses, users sometimes ran into considerable difficulty when they attempted to secure materials listed in the response. There was suggestion that descriptors should be included which identified the location(s) of the material so that those materials which can be found at the local center from which the request originated might be listed.

2. Library Services

The major focus of the monitoring of library services was on materials acquisition and shelving. The processing of items (from order date to shelving date) for the instructional materials library was found to average 103 days, ranging from 61 to 273 days. Obtaining the materials required a wait of 52 days on the average. Cataloging of the purchased items took an average of 53 days. The items reached the library shelf within one day of cataloging.

An additional study focused on the review of the information provided by publishers regarding the value and characteristics of the instructional materials they produced. Findings suggested that there is a paucity of information presented by publishers concerning the material. The most interesting finding was that only 17.37% of the 380 materials in the sample claimed any applicability to special education.

3. Field Services

In addition to monitoring activities associated with the IRP and Library services (internal to the UT SEIMC) there were efforts to index the use and perceived value of services which were related to state program development (external to the UT SEIMC). Basically, there were two thrusts to these efforts - impact surveys and training session evaluations. Since training session evaluations are reported elsewhere (Section III) only impact surveys will be discussed here.

The intent of an impact survey is to determine the extent to which services are reaching targeted populations and the degree of perceived or, ideally, actual success associated with each service. Impact surveys provide both summative and formative information. That is, decision makers may be provided data to support their judgment regarding the value or worth of a program and, at the same time, may be given data which direct program revision activities.

Three impact surveys were accomplished by the UT SEIMC during the eight year funding period. These are report-

ed in Research Reports 3.1 through 3.3 and will be briefly discussed in this section.

The initial impact survey issued in FY 72 and focused on SEIMC services in Arkansas and Oklahoma. A list of 496 subjects (205 from Arkansas and 291 from Oklahoma) was developed through a random selection of names from special education teacher lists that were provided by the departments of education of each state. Thirty-one percent of the sample returned completed survey instruments.

A central component of the survey was the determination of the extent to which the concepts underlying the SEIMC operation were understood by potential clients. Seventy-five percent of the respondents were found to be familiar with SEIMC concepts. However, somewhat discouraging were the data suggesting that respondents were not knowledgeable about the SEIMC in their region. Sixty-three percent of the users in Arkansas and 59 percent in Oklahoma knew of an SEIMC in their region. An even smaller number, 40% and 42% in Arkansas and Oklahoma respectively, used the SEIMC.

At the time of the survey, Oklahoma users tended to be located nearer to SEIMC's. This fact probably led to the finding that Oklahoma respondents used their SEIMC's more frequently than the Arkansas users. In fact, most Arkansas users responding to the survey came into contact with SEIMC services "only occasionally throughout the year".

An interesting but expected finding was the low level of IRP use in both states. In the combined sample only 26% of the respondents were familiar with the program and those responding that they had used the program was even lower. This was expected because of the stage of development the IRP was in at the time of the survey.

The second impact survey was directed at perceived value of services in Arkansas. This survey was initiated in FY 73. One hundred twenty seven individuals, or 67.9 percent of the potential sample, returned questionnaires that were mailed to them.

The majority of respondents, or 76%, were special education teachers and 81% were employed by a public school system. The largest category of handicapped learners served by those replying to the survey was EMR (47%) followed by L/LD (18.5%) and TMR (14%). Instructional materials were the primary type of material sought by the professional.

SEIMC services were judged to be satisfactory by users. It should be noted, however, that there was variation in response which suggested that users were not completely satisfied with services. Evaluations of services were supported, in many instances, with comments. These generally addressed issues related to materials services, delivery, check out periods, selection and scope of materials.

The final impact survey was implemented in FY 74 and centered on services being delivered to the educational communities in Texas, Arkansas and Oklahoma.

The survey was conducted in an effort to obtain an index of the usage and perceived value of services provided by local SEIMC's in the states of Texas, Oklahoma, and Arkansas. The following remarks are intended to provide the reader with a summary of the findings extracted from the analysis of the data generated from the responses of the total sample to the survey instrument. A complete report is set forth in Research Report 3.3.

The target population for the investigation was composed of all users of SEIMC's in the three states. A sample was developed by the SEIMC Field Director in each state in collaboration with SEA and local center personnel. Seven hundred and thirty nine potential respondents were selected for the survey. Each received, via U.S. mail (1) a survey instrument, (2) a memorandum describing the survey and (3) a stamped, pre-addressed envelope for the return of the instrument to the participating SEA. Thirty-eight per cent or a total of 282 responses were returned by the cut-off date.

Sixty-eight per cent of the respondents were

Special Education classroom teachers. The handicapped learners served by those completing the survey instrument were primarily EMR or LLD. The education level of these learners was designated as multi-level by 56% of the sample.

The type of material sought by the user was of interest to the investigators. Data suggested that the primary choice was instructional materials (90%) followed by professional materials (71%) and equipment and machines (65%).

Clients were asked to evaluate the SEIMC services that they had used by responding to a Likert scale. The data indicated that all services were rated highly (approximately 80% of the responses fell at the top end of the scale). One possible exception to this was in the area of Parent/Community Involvement. Fifty per cent of the responses fell at the top end of the scale, while 27 per cent fell in the opposite end.

A similar trend was noted when clients were asked to indicate which services should be continued. Approximately 85% of the clients wanted the services to be retained. It was interesting to note that 71% felt that parent and community involvement should be retained.

Fifty-three per cent of the respondents offered written comments related to SEIMC services. Again the trend was positive, being supportive of continued service.

C. Investigatory

During the period extending from 1968 through 1970, the UT SEIMC began to move from a service operation to a Research Training facility. Four broad target areas were identified. These are described below:

1. Materials Effectiveness: This program of research was aimed at empirical testing of various types of instructional materials, various aspects of material design, and material characteristics in terms of their effectiveness with different types of handicapped children and youth.

2. Effectiveness of Teaching Procedures and Techniques: This program of study focused on the effectiveness of various

teaching procedures and techniques with differing types of handicapping conditions in children.

3. Early Childhood Instruction and Educational Facilitation: Transition-year work in this area primarily consisted of collaboration with the National Training Center for Directors of Early Childhood Education Projects which is affiliated with the Department of Special Education. Initially this effort focused primarily on the development and evaluation of multimedia instructional packages to be used by the staff of Early Childhood Education Centers in training pre-school teachers of the handicapped. Post-transition work included more research with children, testing and developing materials and procedures which can be used at early ages to reduce the debilitation of various handicapping conditions.

4. Environmental Manipulation: This program of study was based on two concepts: (1) much of the environment of our exceptional children does not reduce but, in fact, may add to the debilitation of the handicap, and (2) many aspects of the daily environment are instructionally non-productive and comprise a serious and flagrant waste of space, time and educational potential. Much of this presently non-productive environment might be effectively utilized for educational purposes in a maximally efficient program of instruction.

Nine investigatory activities were issued during this period. These are described in Research Reports R4.1 through R4.9.

D. Recommendations:

1. General Recommendations

It is recommended that the program evaluation staff keep in mind the concepts of symbiosis and synergism in executing all of its activities. They must remember that they are not functionally independent. There is a mutual dependency and benefit that exists in a complex organization. Each component serves and is served by other components. Additionally, note should be made that all components within the organization

are working together to achieve one goal - an efficient and productive program which promotes the educational and social growth of the handicapped learner.

The same is true from an external point of view. All evaluation efforts should take into consideration the consummer of the results of such endeavor. They, or their representatives, should be involved in all stages of the evaluation project; from its design to implementation and interpretation.

2. Materials Evaluation

There are presently literally hundreds of instructional materials resting in SEIMC's located throughout the service region of the ALRC/NCEMMH Network. To many who intend to use these as educational intervention tools the SEIMC represents a jungle. Some strategies must be developed to help teachers and others make it through those jungles unscathed. Further, it has been said that today's learners suffer more than any other group from poor or inadequate laws to protect them as consummers. Clearly, there is justification for strategies which provide information for those who try to make a decision concerning the use of a particular material. Two strategies are recommended below: 1 global and 2 specific. It should be noted that both depend heavily on the inclusion of teachers in the evaluation process. Secondly, the concept of evaluation according to conditions-of-use should be maintained.

a. Global Materials Evaluation Effort

The following procedure is suggested as a strategy to gather evaluative information on a large number of materials during a single administration period. The procedure is closely tied to that outlined under D.2.b. Additionally, it is purposefully general so that there might be some discretion on the part of centers wishing to implement such endeavors. Teachers and other users of instructional materials should be utilized in gathering material evaluation data of a summative nature. Procedures that might be utilized in collect-

ing, analyzing, and disseminating such information are outlined below.

Procedures:

Target Materials

1. Identify finite sample of materials to be evaluated.

Select Evaluation Period

2. Randomly select a discrete time period (usually two-four weeks depending on local check out policies) within which materials will be evaluated.

Determine Evaluators

3. Utilizing one or more of the following alternatives, designate a body of materials evaluators.

Alternative 1 -- Maintain a group of individuals who have been trained in the utilization of the materials evaluation instrument and who are paid for each evaluative effort.

Alternative 2 -- Advise local users of the impending evaluation effort and ask for paid volunteers.

Alternative 3 -- Require all users of local repositories to evaluate target materials subsequent to their use.

Alternative 4 -- Randomly assign evaluation forms to target materials as they are checked out.

Obtain Instrumentation

4. Obtain machine readable materials evaluation instrument from national source (to be identified). Allow 6 to 8 weeks for delivery.

Label Evaluation Instrument

5. Place the material title and union catalog number on each evaluation instrument prior to implementation.

Implementation

6. Implement study during designated time period.

Scoring and Analysis	7.	Subsequent to data gathering phase send completed forms to the appropriate national source (to be identified) for scoring and analysis.
Computerized Data Base	8.	Information generated from evaluation effort will be input to a computerized data base that utilizes demographic data (pupil, teacher and instructional environment characteristics) as descriptors.
Information Utilization	9.	The information contained in the data base will be made available to local centers upon request.

A philosophical justification for the policy and attending procedures contained herein is found in Sourcebook for the Evaluation of Instructional Materials and Media.

b. Specific Materials Evaluation Effort

This procedure is dependent upon and should follow that described in D.2.a. Further, it is seen as the responsibility of the Regional ALRC which may obtain precise direction for the NCEMMH. Again, the procedure is general in nature and readers desiring specific evaluation strategies relevant to this topic are refered to "The Sourcebook for the Evaluation of Instructional Materials and Media" published by the SEIMC/RMC Network in FY 74.

It is recommended that those materials which are judged to be satisfactory under the procedure noted above be subjected to closer scrutiny through the utilization of quasi-experimental designs. Thus, the first procedure is seen as a filtration system by which certain materials are selected for further study. This additional study must obtain in the actual educational setting. Conditions-of-use must be varied so that evaluative information relevant to a number of factors will be available.

The goals and objectives of the material should be centered on in the design and implementation of

the study. Pupil change should be the major concern with additional variables including such things as durability, cost/benefit, motivational characteristics and spread of effect.

Additional studies may be focused on comparisons between those materials which were judged to be good under the procedure noted in D.2.a and those judged to be poor. The question here would be "what makes a material good?".

Information generated from the investigations must be quickly disseminated to users. It must be reliable, timely and compatible with their needs.

3. Monitoring of SEIMC Services

Two monitoring systems are recommended - Project Instrastructure monitoring and Regional Evaluation of services. There are obvious interrelationships which exist among the strategies suggested under each system.

a. Most educational programs may be thought of as systems which have as their major components inputs, processes and outputs. The systems are ideally projections or plans based on needs assessment studies that have identified discrepancies which exist between a desired level of some condition (e.g., quality or quantity of information acquisition) and actuality. Systems or programs are then designed to overcome or meet needs. Goals and objectives are stated; processes or strategies are designed to attain the goals; and resources are delineated to support the execution of the processes.

Evaluation may be seen as a process by which information is provided to program or system decision makers. It is usually seen as a three stage process: 1) identification of salient foci, 2) the development and administration of data gathering devices and 3) reporting the results of evaluation activity.

Each of the above stages should occur at all phases of programming. Thus, evaluation should issue at the following program points: 1) design, 2) program installation, 3) process, and 4) outcome.

The reader is referred to Figure I

Figure I

Evaluation Questions by Program Component

Program Component	Evaluation Questions
1. Design	1. Are resources delineated
	2. Are pre-conditions and criteria for selection for each resource present?
	3. Are targets described (preconditions/ criteria for selection)
	4. Are program activities stated in a way that clearly defines and differentiates staff and student activities?
	5. Are expect[illegible]utcomes stated in observable and/o[illegible]easurable terms?
	6. When appropriate, are enroute objectives stated?
2. Installation	1. Is the program being installed according to design specifications?
	2. Are stated resources present?
	3. Do staff and students meet preconditions and criteria?
	4. Are stated program variables present?
3. Process	1. Are student and staff activities occuring according to design specifications?
	2. Are en route objectives being accomplished?
	3. How much is the program costing?
4. Outcome	1. Have targets changed to the extent that was predicted on the dependent variable (Change that was to occur as a result of programming?)
	2. When appropriate, does the product meet the specifications of the design?
	3. When appropriate does the product produce the expected change?
	4. What was the cost benefit rather for the program?

for a delineation of the major questions the evaluator might ask according to specific components. It is further noted that monitoring may be in different stages across the program. That is, when some program thrusts might be undergoing design evaluation others might be in the installation or process evaluation stages.

It is recommended that all internal monitoring strategies be based upon the framework discussed above. An extensive discussion of an evaluation model that reflects the above suggestions is set forth by Provus (1971)[1].

b. Regional Evaluation Concerns

The model that is recommended for the evaluation of regional service centers addresses the continuim of services concept. There is a recognizable hierarchy that can be delineated which would reflect a dimension of closeness to field (child-based resource activity). At one extreme you would find HEW, following sequentially would be USOE, BEH, the NCEMMH, Regional ALRC's, Associate Special Education Instructional Materials Centers, teachers, and finally the handicapped learner. Associated with each step in this hierarchy is a set of objectives - the "why" of their existence. Assuming that this is a hierarchy then it is critical that a communication interlock be set up.

For the purposes of this paper the information being communicated refers to the objectives/goals of the organs making up the linkage system. The role of the ALRC/NCEMMH Network is to communicate the goals and objectives of those institutions above it to the ASEIMC level.

There are several information requirements associated with this process and its subsequent evaluation. The requirements might be divided into several ASEIMC components and/or tasks as they relate to regional concerns. The areas of information need are listed below.

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[1] Provus, M. The Discrepancy Evaluation Model. New York: The McCutchen Co., 1971.

(1) Statement of needs addressed by each ASEIMC within the region. Regional concerns:

(a) Do the needs addressed by each ASEIMC contribute to the fulfillment of the Regionally stated needs?

(b) Do the sum total of the needs addressed across Associate Centers cover all the needs addressed at the Regional level?

(c) Do the number of ASEIMC's addressing each need reflect the priorities set by the Regional Center?

(d) Are the needs realistic?

(2) Statement of ASEIMC goals. Regional concerns:

(a) Do the goals of each ASEIMC reflect the Regional SEIMC goals?

(b) Do the sum total of ASEIMC goals (summed across units) cover the Regional program goals?

(c) Do the number of ASEIMC's addressing each goal reflect the priorities set on the Regional program goals?

(d) Are the goals realistic?

(3) Statement of anticipated outcomes at the end of the planning period. (i.e., statement of individual ASEIMC program criteria). Regional concerns:

(a) Do the outcomes specified by each ASEIMC reflect the outcomes of the regional centers?

(b) Do the sum total of outcomes across ASEIMC's within the region cover the regional center's outcomes?

(c) Do the number of ASEIMC's addressing itself to a particular outcome reflect the priorities set at the regional level?

(d) Are the outcomes specific enough to facilitate appropriate planning for evaluation?

(e) Is each outcome accompanied by a statement of the evidence that will demonstrate that the outcome has been achieved?

(f) Is a criterion attached to each outcome or statement of evidence?

(4) Plan for achieving outcomes including a list of pre-requisite conditions and a flow chart of activities. Regional concerns:

(a) Are all the pre-requisite conditions stated?

(b) Are ASEIMC activities stated and charted?

(c) Does the plan seem reasonable for producing the stated outcomes?

(d) Are the elements of the plan specific enough so that other centers could also utilize similar or the same methodologies?

(5) Plan for monitoring the ASEIMC. Regional concerns:

(a) Does the plan contain a mechanism for monitoring the installation and operation of the ASEIMC activities?

(b) Does the plan include a reporting system both for feedback to the ASEIMC and/or information to regional and Network sources?

(c) Does the plan include criteria by which specific program elements can be judged as being installed and operational?

(d) Does the plan include any system for reporting program re-design or reallocation of priority?

(e) Does the plan contain a mechanism for recording unexpected variables which might affect the outcome?

(6) Program assessment plan. Regional concerns:

(a) Is there evidence by which achievement of outcome can be determined?

(b) Is the evidence objective (quantifiable)?

(c) Are the instruments utilized in the evaluation process appropriate?

(d) Is the design appropriate for anticipated outcomes? (i.e., does it allow the evaluator to answer his questions?)

Note that all phases are highly dependent upon each other. Activity in each reflects activity in others. Up to this point it should have been evident that the emphasis has centered on a two way interaction between the Regional ALRC and the ASEIMC's within its region. That is, the ALRC communicates a set of objectives which should be focused upon or accomplished at the ASEIMC level. The ASEIMC in return furnishes the ALRC with certain required information relevant to the execution of these goals. Associated with this process is concern related to its breadth or scope. The ALRC's activities are diverse and the management of these is a full time job. It is recommended that the evaluation of ASEIMC activities be decentralized. That is, evaluation strategies should be initiated by the ASEIMC personnel. These individuals are closer to and more involved in the execution of communicated goals and objectives.

This last point leads to a final consideration. It must be recognized that ASEIMC's commonly have objectives which are beyond those addressed through the hierarchy discussed in this paper. These objectives are either locally focused or transmitted throughout the state. Evaluation of these objectives should not be the concern of the ALRC's evaluation scheme beyond the point of consultation and/or technical assistance.

In sum, it can be seen that evaluation is a total process. Further, it depends heavily upon a communication linkage system. Evaluation at each link in the system depends upon communication of several types of required information across all levels of the system. The most critical communication is found between those levels in hierarchical juxtaposition.

4. Research Recommendations.

The pendulum has returned to the side of services to the field. In recognition of this fact, it is recommended that theory based research should not be a function of an ALRC or one of its components. It is recommended, however that when instructional materials and SEIMC services are being evaluated, every effort should be made to follow the guidelines set forth for educational research. Many of these are delineated in the "Sourcebook" described previously.

ATTACHMENT RE-1

1.0 Information Retrieval System

1.1 Evaluation of the UT SEIMC Role in the Second Annual Training Session (1971)

The purpose of this study was to evaluate the training session in regard to effective communication of information vital to the development of the UT SEIMC Information Retrieval Program (IRP). There were thirty-four participants including representatives of State Education Agencies of Arkansas, Oklahoma, and Texas, and Special Education staff members from Texas Education Service Centers. Results indicate that the goals of the training session should have been to increase participants' interest in the IRP and the UT SEIMC in general rather than on the dissemination of facts concerning IRP operations.

1.2 Evaluation of Information Retrieval System Requests: Phase I of the Evaluation of the IRS (1971)

This report dealt with the evaluation of the accuracy of the information contained in the user request forms submitted to the Information Retrieval System (IRS). Every fifth request received during the month of October was evaluated, yielding a sample of eighty-six requests. Poor performance in "Concepts/Skills," "Format," "Mental Age," and "Chronological Age" indicated a need for further user education or greater emphasis to be placed on the definition of these areas and more careful consideration of the information provided for them.

1.3 IRS In-house Evaluation: Phase II of the Evaluation of the IRS (1972)

This report was concerned with the relative in-house efficiency with which each request submitted to the IRS is processed. Nine distinct time intervals were identified in the processing stage. Statistical results indicate that requests processed from the tape file required more time than those requiring interface with the computer. Also, the greatest time lag occurred between the time of receipt and the preparation/tape assignment step.

1.4 IRS User Evaluation: Phase III of the Evaluation of the IRS

The focus of this report was user reaction to the data returned in response to their requests submitted to the IRS. With less than twenty percent return from the sample population, the results indicate that, in general, users were pleased with the information they have received.

1.5 SEIMC Impact in Arkansas and Oklahoma: A Survey (1972)

A random sample taken from special education teacher lists provided by the departments of education in Arkansas and Oklahoma was used to discover the impact of the associate SEIMCs on each state's special educators. Results indicated a major impact among the respondents with prior knowledge of their SEIMC. However, survey results indicated a lack of impact on the total population of special educators.

1.6 Texas User Response to the UT SEIMC Information Retrieval Program (1973)

This study asked Texas associate SEIMC personnel who were directly and indirectly involved with the use of the Information Retrieval Program to evaluate its worth to the users. Results showed the IRP to be used most frequently by Educational Diagnosticians and special, regular, and resource teachers for the primary purpose of planning individual prescriptions. All items currently included in an IRP response were generally considered fairly important. Other items requested in a response were readability, educational target, interest, grade and reading levels. Ratings for IRP software indicated the request forms, catalog, Users Handbook, and hard copy of annotations were the most useful; high frequency requests/responses and numerical listing of materials were useful; and the Inverted File and microfilmed annotations were less useful. In the transmission of requests and responses, the mail was seen as the most realistic medium. TWX and telephone were the most ideal for submitting requests. The telephone was thought to be unrealistic for transmission of responses.

1.7 Information Retrieval System Analysis (1973)

Evaluation of the Information Retrieval System was achieved by keeping time records on each request entering the system, analyzing the quantity and quality of information included in each request, and by asking a sample of the users to assess the validity of the response she/he received. System use data was analyzed for the number of requests submitted, average processing time, mode of reception, retrieval cost analysis, and desired minimum/maximum turnaround times associated with the request/response process. The results of the evaluation called for some combination of the TWX and U.S. Mail to be used in transmission of requests and responses. Increased training for personnel to aid users in filling out the request form was also deemed necessary.

1.8 Information Retrieval System: Input Process (1973)

This was a breakdown of costs and a flow chart and accompanying narrative of the stages and steps associated with the addition of items to the IRS data base.

1.9 An Alternative Approach to IRS Evaluation (1973)

User evaluation of the Information Retrieval System has not been satisfactory. This paper proposed to pay teachers picked to represent the regional service centers in Texas, Arkansas, and Oklahoma to participate in an alternative method of evaluation using simulated problems.

1.10 Evaluation of User IRS Requests - Phase III (1971)

During the period July 27 through July 29, 1971, the Texas Education Agency conducted a training session for its Division of Special Education. Comparison of pre- and post-test results suggested that the participants gained little from the workshop. Subsequent investigation of the quality and quantity of user requests pointed to the need for further training and for the development of a training package for the IRP.

1.11 Report on Evaluation of IRP Training Sessions (1973)

This report reflected the finding of an investigation into the success of training sessions designed to provide information to be used by Texas regional users of the Informaiton Retrieval Program. Training session participants were regional support personnel responsible for transferring the information to users in the field. The success of the training sessions appeared in increased usage of the proper terms (those provided in the thesaurus) in the completion of request forms. The sessions also had a positive effect on public relations through increased awareness of the IRP.

2.0 Library Services

2.1 Library Evaluation Report I (1972)

Time and procedures involved in obtaining materials for the SEIMC instructional and professional libraries was the subject of this study. Library personnel involved in the process were observed throughout the seven-step procedure over a period of 49 days. Data indicated that a considerable period of time was involved in obtaining both professional and instructional materials. This was attributed to two factors; getting materials from the publisher and the cataloging of materials once they were received at the Center.

2.2 Library Evaluation Report II (1972)

The report focused on elapsed time from arrival of a new material to shelving of the material. The study procedure involved random check of materials stored for cataloging and shelving. Data indicated a substantial time lag from acquisition to shelving. Recommendation was for additional personnel in both libraries.

2.3 Library Visitations (1972)

The purpose of this study was to determine the types of people using the UT SEIMC on a walk-in basis. The majority of the users were students who came to read and/or check out professional books and to read journals. Teachers who came to view and/or check out materials ranked second in frequency of use. A few faculty members used the UT SEIMC to peruse and/or check out both professional books and instructional materials.

2.4 Evaluation of Instructional Materials: SEIMC Phase II (1968)

This paper established the necessity for research and evaluation activities with regard to instructional materials. Clarification of the distinction between research and evaluation and a model for application of each to instructional materials was provided. Additionally, the role of the SEIMC in research and evaluation was outlined.

2.5 UT Position Paper Relevant to Materials Evaluation Strategies (1971)

The parameters involved in instructional materials evaluation were discussed in the paper. Assumptions that served as the foundation for the UT SEIMC's approach to materials evaluation were delineated. Emphasis was given to the identification of potential evaluators and to the types of information that might be sought. Primary consideration was given to the collection of both demographic and evaluative data from teachers.

2.6 Materials Evaluation Study - Preliminary Report (1973)

The results of a materials evaluation investigation were discussed. The total number of evaluation forms returned was 2572. The primary concern for this paper was the dissemination of demographic information relative to the teacher evaluators.

A discussion of an evaluation of the instrument used to collect the data was also presented. Undergraduate and graduate special education students and special education classroom teachers participated in this aspect of the study. Both positive and negative comments were generated. The major positive point was the perceived thoroughness of the instrument while the main negative point was its test-like appearance.

2.7 Teacher Evaluation of Instructional Materials (1973)

This paper delineated procedures for gathering instructional materials evaluation data utilizing teachers as respondents. A method for disseminating the results of such investigation was presented.

2.8 Proposal: Development and Implementation of an Interactive Retrieval System for Materials Evaluation Data (1973)

The proposal described a three phase project which was designed to test a system for the instructional materials evaluation retrieval (SIMER). A total of $3,097.00 of Title III, ESEA monies was allocated to the project by TEA. The proposed three phases were Design, Installation/Implementation, and Evaluation.

2.9 Final Report: System for Instructional Materials Evaluation Retrieval (SIMER) (1974)

The report described the results of the evaluation of a three stage project that had been funded by TEA. SIMER was developed on the assumption that materials evaluation data must include conditions-of-use information in addition to evaluative data. Evaluation information was gathered at each stage. There was indication that users were favorable to a system such as SIMER. However, they would not pay for the system. Further, the data base would have to be increased considerably if there was to be any use of the system.

2.10 UT SEIMC Instructional Materials Survey (1974)

The purpose of this study was to determine the extent of information provided by publishers regarding the value and characteristics of instructional materials they had produced. Results indicated that there was a considerable lack of information. Only one percent of the materials reviewed cited any evaluation data. Seventeen percent claimed applicability to special education. It was concluded that efforts should be made to promote the inclusion of additional information with instructional materials.

3.0 Field Services

3.1 SEIMC Impact in Arkansas and Oklahoma (1972) (See 1.5)

3.2 Evaluation of Services Offered through the Little Rock, Arkansas SEIMC (1973)

Results of the study suggested that public school teachers of EMR children were the primary users of the Little Rock Center. Loan of instructional materials was the most frequently used service. In general, respondents indicated that they were satisfied with the services which they utilized.

3.3 Regional Impact Survey Related to SEIMC Services, FY 74 (1974)

An impact survey was carried out to index the extent to which SEIMC services were being used and the perceived value of

these services. Two hundred and eighty-two subjects from Arkansas, Texas and Oklahoma responded to the survey instrument.

The loan of instructional materials was the most frequently utilized SEIMC service while parent and/or community involvement was the least frequent. All services were perceived as being satisfactory and indication was given that they should be retained.

3.4 Evaluation of the 4th Annual Training Session of the Texas System of SEIMC's

Two evaluation devices were developed to assess the impact of the training session of participants. The first concentrated on the affective domain and yielded information which was supportive of the workshop. The second related to the cognitive domain and indexed the participants' perceived growth or change related to the training session foci. Response indicated that, in general, the level of participant knowledge changed from essentially non-existent to a level of high existence.

4.0 Investigatory

4.1 Educational Methodology: An Examination of Approach

Maximally effective educational procedures have often been lacking due to the absence of a serviceable model for research and information dissemination. Recent developments in major project networks provide a vehicle for implementing programmatic efforts toward improvement. A model is discussed which promises additional short- and long-term advancements in instructional methodology.

4.2 The Role of Information, Attitude and Behavior in Staff Training: A Model for Evaluation (1970)

Difficulty in articulation of objectives is noted as a problem in effective evaluation of staff pre- and in-service training. The evaluation of the stated objectives rather than performance has contributed substantially to this difficulty. A focus of effort on achievement of objectives rather than an overlay sophisticated statement of objectives is viewed as critical to circumventing the difficulties noted. An evaluation model is suggested which includes assessment of information, attitudes, and behavior. The model presented de-emphasized value judgement relative to the type of objectives stated since this is not central to the evaluative function.

4.3 Retention in Retarded and Non-Retarded Children as a Function of Direction of Recall and Material Associative Strength (1969)

Immediate, 24-hour and 15-day recall performance of 48 retarded and 48 non-retarded children was investigated as a function of material associative strength and direction of recall.

Results indicated significantly fewer correct responses by retardates after 24 hours and 15 days but not on immediate recall. Subject performance on backward recall was lower than forward recall immediately and after 24 hours but not after 15 days. An interaction between subject classification and direction of recall occured only at 24-hour testing. Subject performance on high associative strength (HAS) material was significantly better than low associative strength (LAS) at all three recall intervals.

4.4 Acquisition of Instructional Material Information as a Function of Manual Design and Material Complexity (1970)

This investigation was one in a series designed to explore the more generic characteristics of instructional materials, including consumer reactions to various aspects of published materials. The focus was on the effects of two types of teacher manual design and two levels of material complexity on comprehension of instructional materials' utilization by fifty-two teachers-in-training. One conclusion was that research on generic characteristics of instructional materials should have a bearing on materials evaluation. The authors also concluded that design features and structural characteristics share a primary role in determining material effectiveness.

4.5 Research on the Psychological-Behavioral Effects of the Physical Environment (1970)

Considerable interest has been generated recently on man's relationship to his environment. Intuition has convinced us that the physical environment has a potent influence on various aspects of human behavior. The present paper explores the status of information on the behavioral and psychological influence of the physical environment. An integration of these disparate bodies of literature around a conceptual model provides a systematic framework for environmental planning and programming.

4.6 Research on Social Adjustment and the Mentally Retarded: Functioning and Training (1969)

This paper contained a review of the research on social adjustment and the mental retardate. The topic was developed from the frame of reference of the retardate's functioning in society in relation to the curriculum that proposes to prepare him for the task of social adjustment.

4.7 The Effects of Task Screening and Scoring Objectivity on Retardate Conservation Performance (1970)

One purpose of this study was to determine whether conservation of mass occurs at approximately the same mental age in mentally retarded individuals as in individuals with normal intelligence. A second area of interest was the degree to which visual screening of the task facilitates the development of conservation

of mass. The degree of scoring objectivity was also studied in terms of its influence on the appearance of conservation. Results indicated no significant differences in achievement of conservation as a function of either experimental variable. The investigation did not provide support for the position that retardates develop the ability to conserve mass to the same degree as their mental age normal counterparts.

4.8 Documentation for Computerized Mailing List: UT SEIMC (1970)

Full documentation for Program MLG (Mailing List Generator) including memory space, run times, flow chart, subroutine and variable descriptions, program listing, sample output, update procedures, file descriptions, and control cards. The program was written in FORTRAN IV to be run on Control Data Corporation's 6600 computer housed at the Computation Center at the Univeristy of Texas at Austin.

4.9 Perceptual Development of Mental Retardates as Measured by Responses to the Holtzman Inkblot Technique (1971)

Several variables from the Holtzman Inkblot Technique (HIT) have proved to be reliable and meaningful indices of perceptual development with normal subjects. The present investigation explored the utility of the HIT with mentally retarded subjects. Ninety-six mentally retarded and normal subjects were studied comprising four criterion IQ-groups ranging in IQ from 34 to 106. Intelligence was used as the predictor variable for perceptual development. Results indicated the HIT to be a useful instrument for assessing perceptual development for the retarded.

4.10 Evaluation of Instructional Material as a Function of Material Complexity and Teacher Manual Format (1971)

Evaluation of instructional material was studied as a function of teacher manual format and material complexity. Results from assessments by 52 teachers-in-training indicated more positive ratings of simple than complex material. This influence was only evident, however, when the material was accompanied by an unillustrated, poorly organized manual. Inclusion of an illustrated, well organized manual eliminated differences as a function of complexity. No main effects differences were evident between manual formats.

4.11 Facilitating Mental Retardates' Social Adaption Through Corrective Habilitation (1971)

The purpose of this paper was to briefly explore aspects of the dissonant interface between the retardates' adaptive or circumventive behaviors and the social environment and to make suggestions for corrective habilitation. The two examples of habilitative training given, "facial expression training" and "posture

shaping for favorable habilitation prognosis," appear to suggest a plethora of other techniques which could prove useful in maintaining the "invisibility" of the retardate in the social milieu.

4.12 Comprehension of Statistical Terms by Special Education Students (1973)

Since special education students have been expected and often required to read in professional journals, a basic knowledge of statistics would seem to be helpful in effectively reading and evaluating research reports. Therefore, this investigation was designed to ascertain the level of comprehension of statistical terminology in a sample of 122 special education students from The University of Texas at Austin. Results suggested that students may not have the tools necessary to determine the worth of an article. There was indication that the problem might be alleviated through either inservice or preservice study in statistics.

4.13 Regional Concerns Related to ASEIMC Evaluation

A model for the evaluation of Associate Special Education Instructional Materials Centers was presented. The underlying assumption was that there is a recognizable continuum of services that extends from BEH to the handicapped learner. This continuum was characterized as a linkage system with the Regional and Associate SEIMC's serving major links between BEH and the handicapped learner. The model addressed the concern for the design of evaluation strategies which would provide for the gathering of required information relative to the regional response to the goals and objectives that BEH had set forth for handicapped learners.

VI. SUMMARY OF ACCOMPLISHMENTS AND RECOMMENDATIONS

It should be noted here that each of the major sections of this report, as well as many of the sub-sections, presented somewhat detailed statements relative to the accomplishments in the respective area. Also many of the sections also contained statements relative to recommendation for consideration as this most worthwhile program is continued. For these reasons, this section will record only those items which are considered to be important:

Accomplishments

Accomplishments of the Regional Special Education Instructional Materials Center, The University of Texas at Austin, during the eight-year grant period have resulted in:

(1) the establishment of Networks of Associate Special Education Instructional Materials Centers in the three States served: Arkansas, Oklahoma, and Texas. The Regional UT-SEIMC served as a catalyst to the development of State Plans for services in each State.

(2) the upgrading of skills of analysis of child-use materials in order to more effectively match materials to the needs of learners who are handicapped.

(3) the production of annotated catalogs of child-use materials to provide information to those relating professionally to the handicapped; and the production of specialized bibliographies and reading lists for professional use.

(4) the design and implementation of a course to train teachers at the pre-service and in-service levels in the effective utilization of special instructional materials and the design and implementation of two special study institutes for the training of materials specialists and educational diagnosticians.

(5) the development of an information retrieval program for matching of instructional materials (child-use) to needs of learners via a machine retrieval process.

Recommendations

Recommendations from the experience of the eight-year grant are:

(1) continuation of activities pertaining to media, materials, and educational technology in which those relating professionally with the handicapped improve their skills in order to benefit those with problems in learning.

(2) expansion of pre-service, in-service, and continuing education training programs which allow teachers to have more sophisticated skills in analysis of materials, adaptation and modification of existing commercial materials, and development of materials to meet the needs of the learner.

(3) consideration by special education divisions of state departments of education to consider certification and/or endorsement of individuals trained in educational technology pertaining to the handicapped.

(4) realization that any service made available to professionals relating with the handicapped needs to be as close as possible to that professional for its most effective utilization.

(5) communication lines which are open to allow avenues to resources which are available to those working with the handicapped.

(6) continuation of efforts to formulate a feasible process for the evaluation of child-use materials to determine their value in instruction of handicapped individuals.

(7) further development of the network concept from the local level to the national level to facilitate delivery of services and to avoid duplication of effort in such areas as catalog production.

(8) recognition by teacher-training institutions of the importance of making instructional media and materials and related training accessible to students in training.